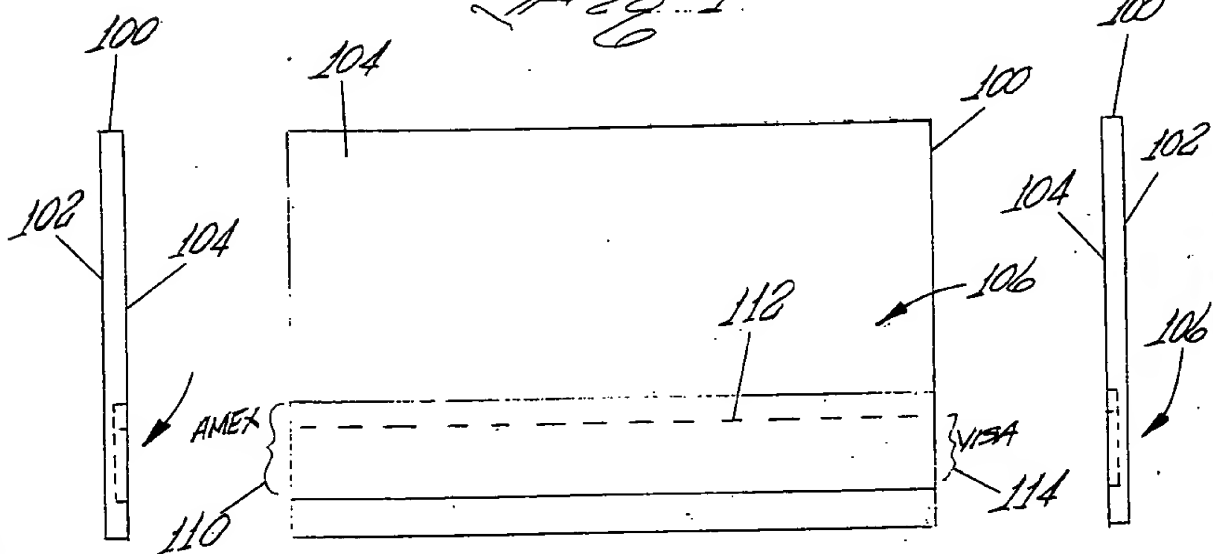
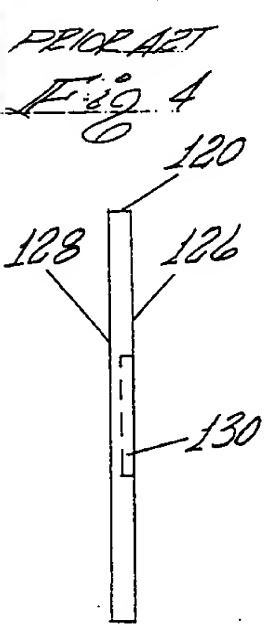


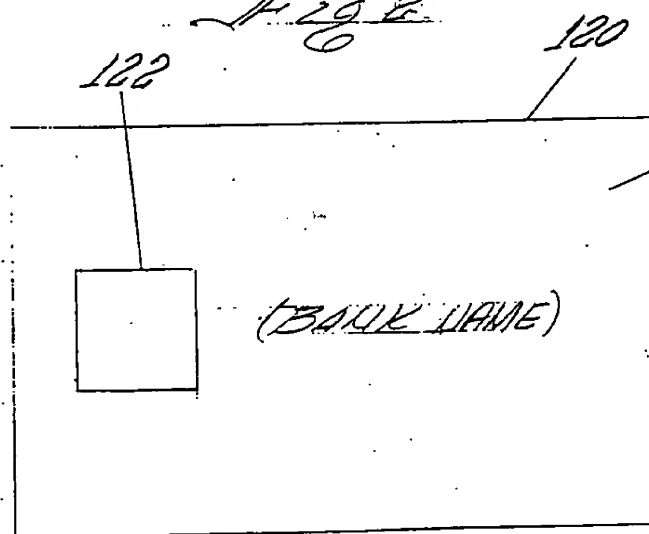
Fig. 1



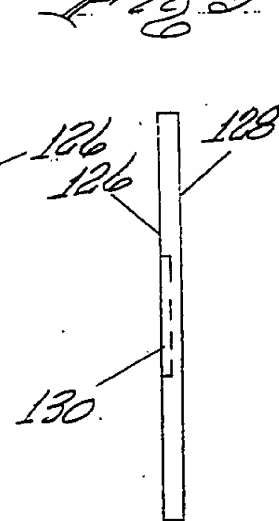
PRIOR ART  
Fig. 2



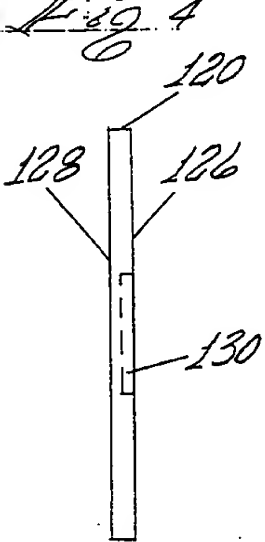
PRIOR ART  
Fig. 4



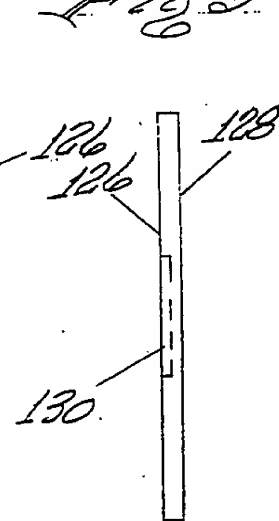
PRIOR ART  
Fig. 5



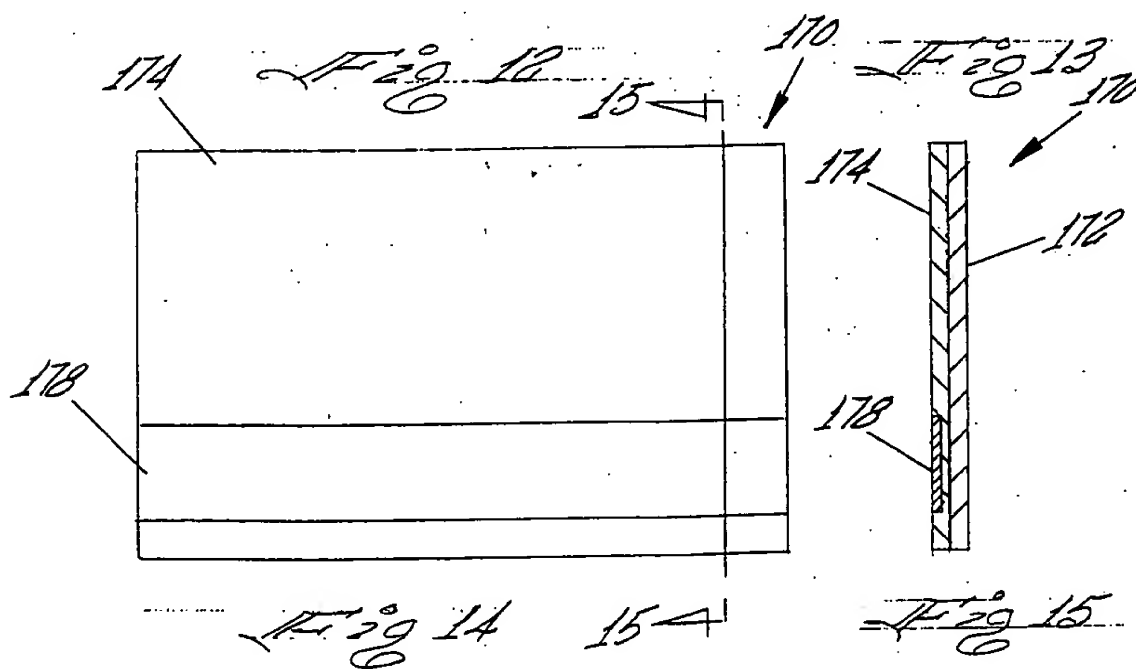
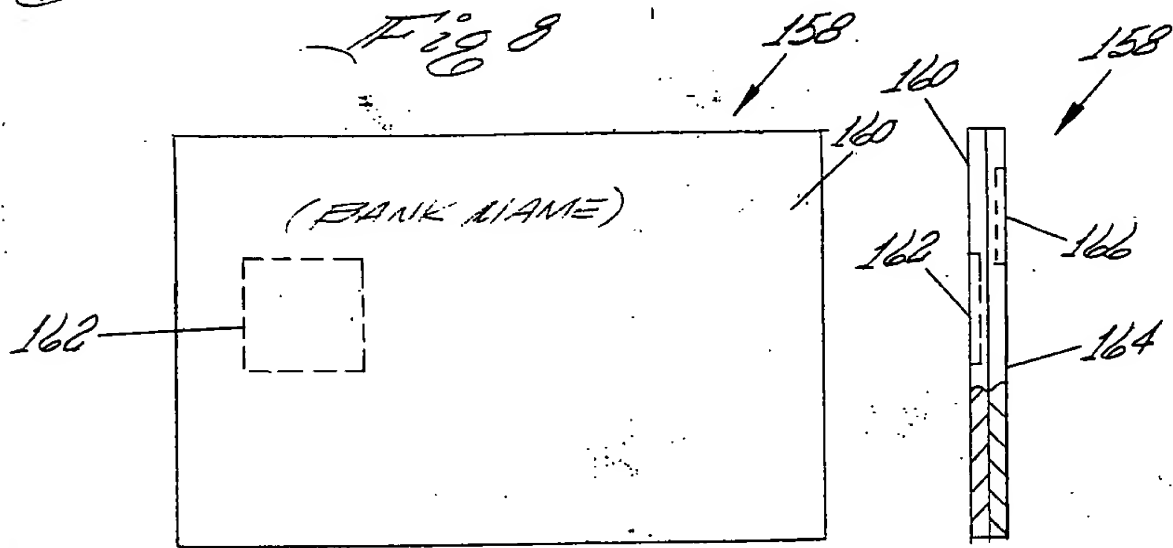
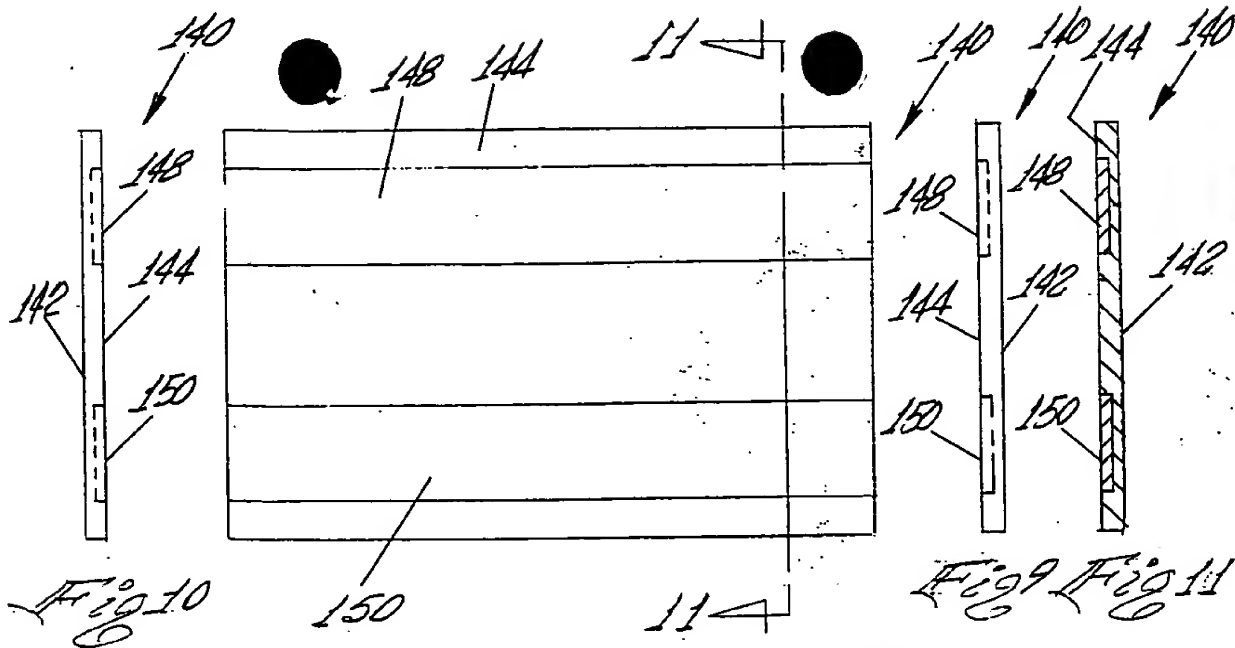
PRIOR ART  
Fig. 3



PRIOR ART  
Fig. 7



PRIOR ART  
Fig. 6



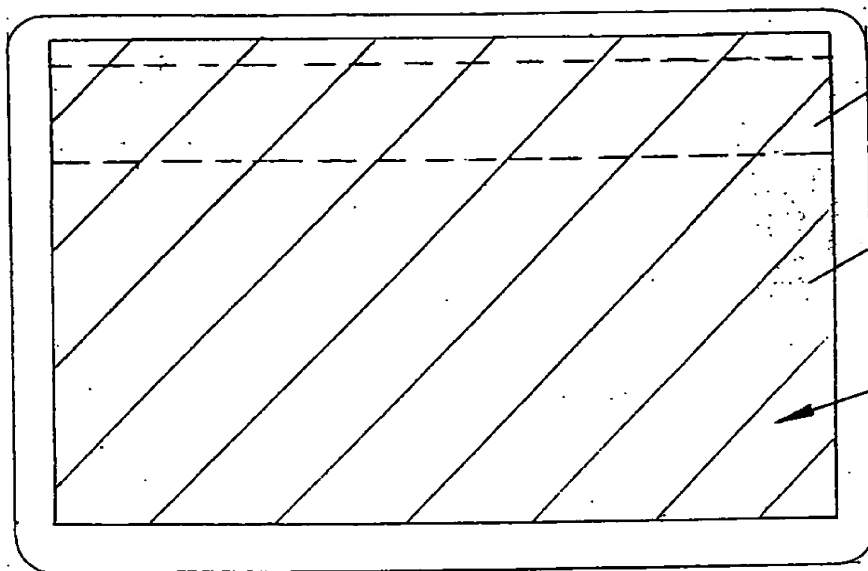


Fig 16

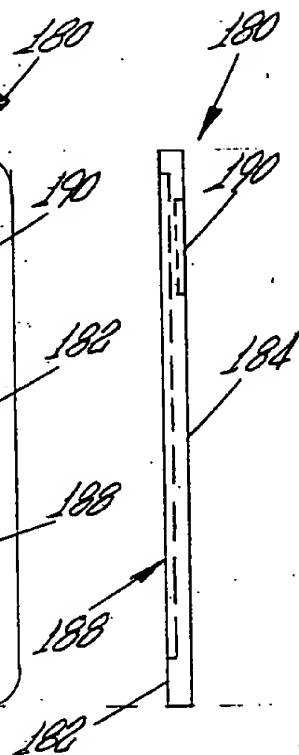


Fig 17

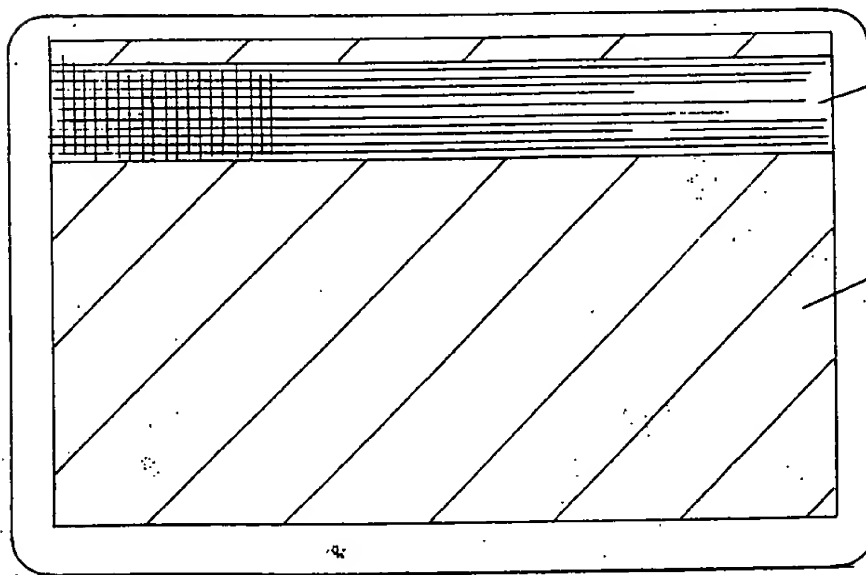


Fig 18

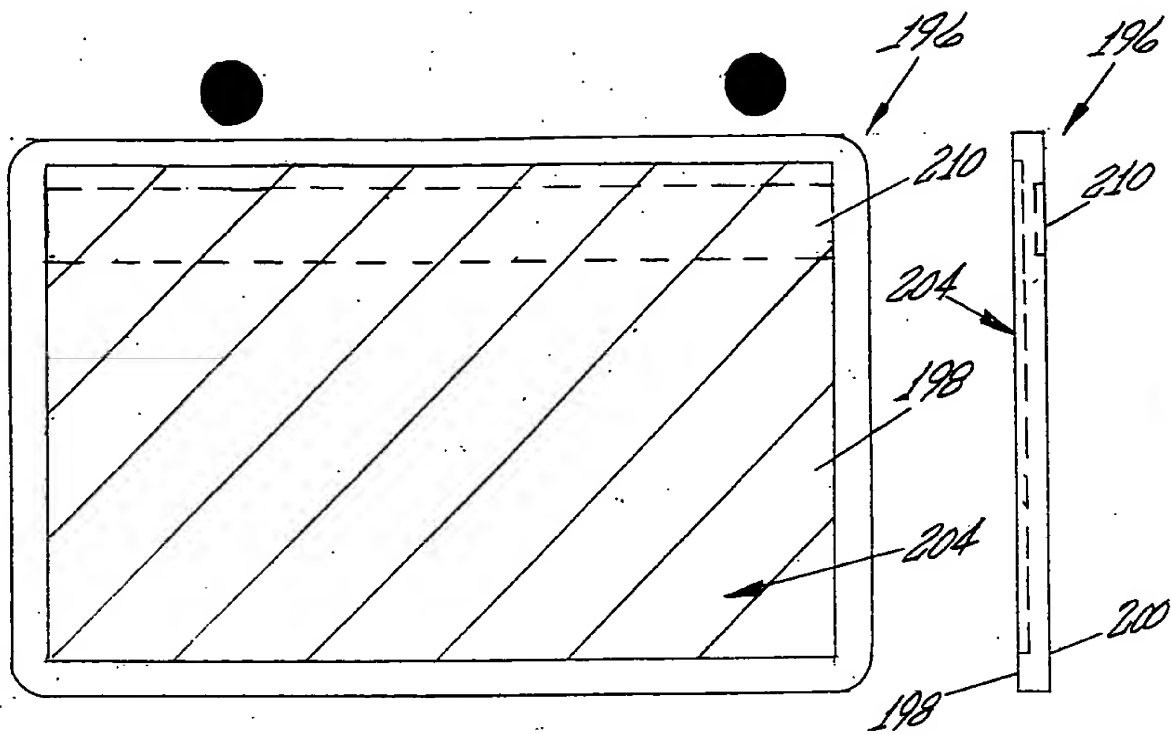


Fig 19

Fig 20

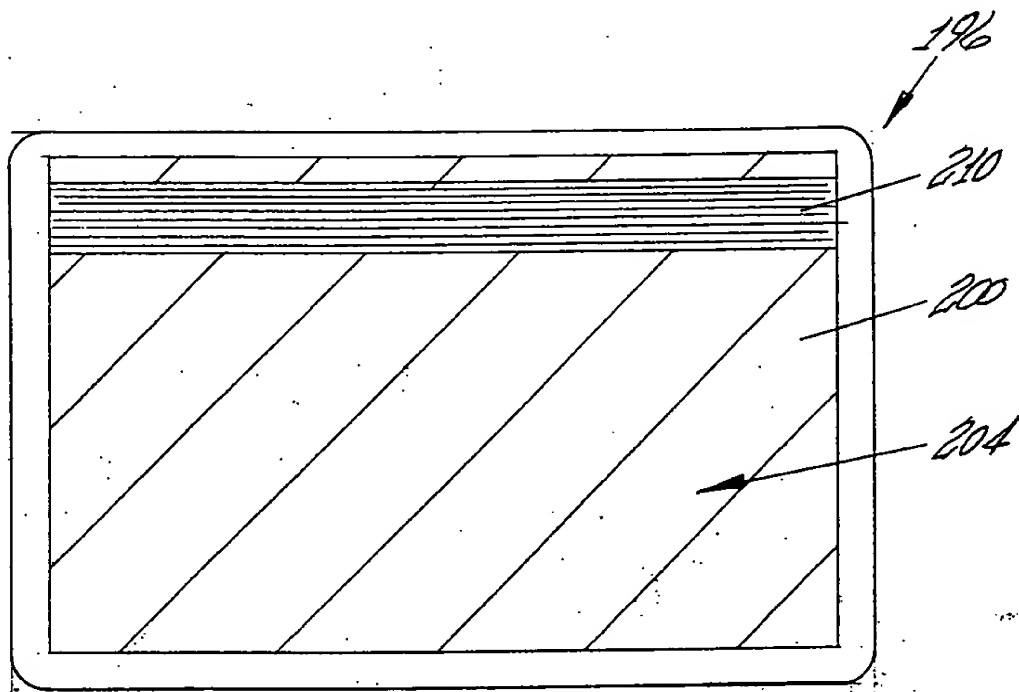
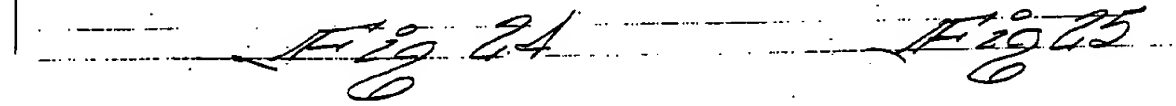
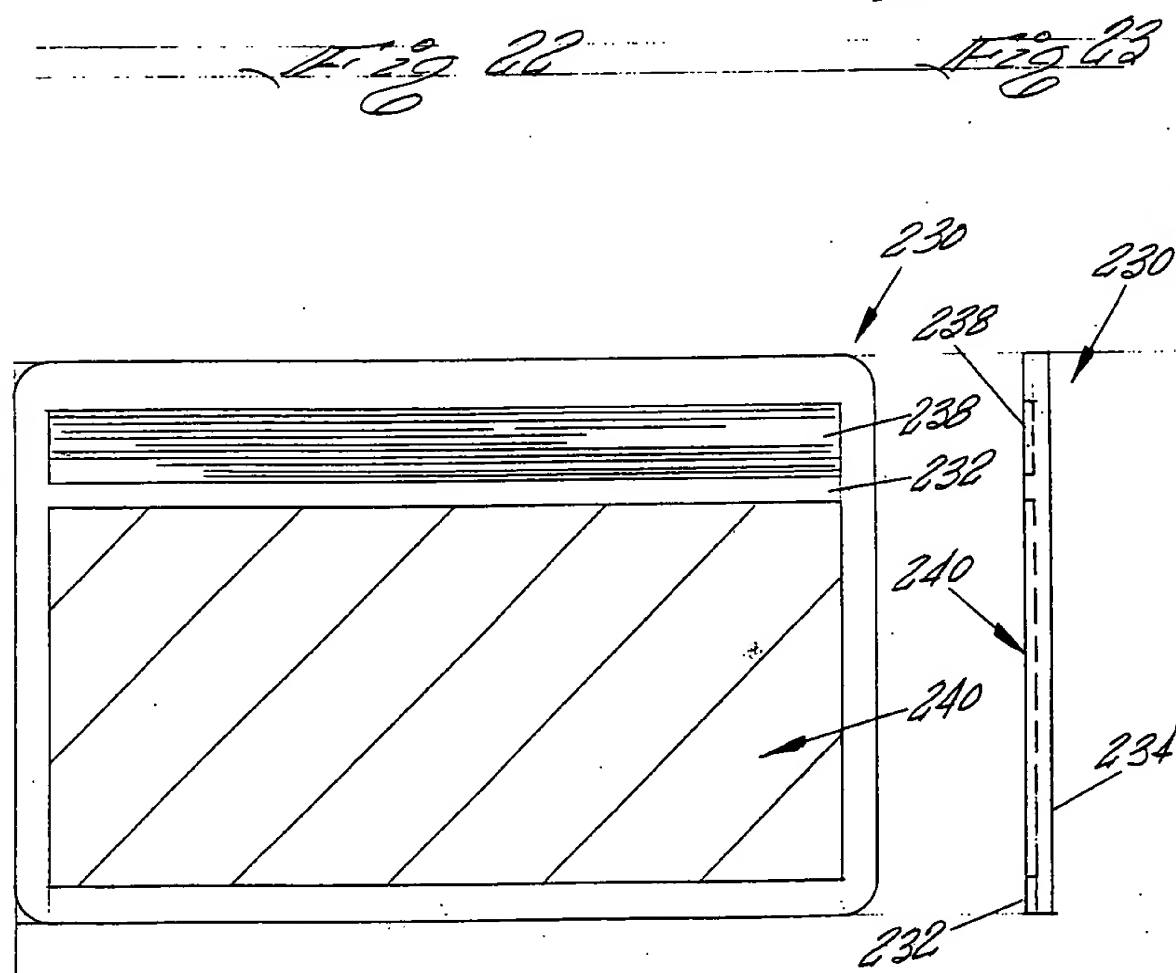
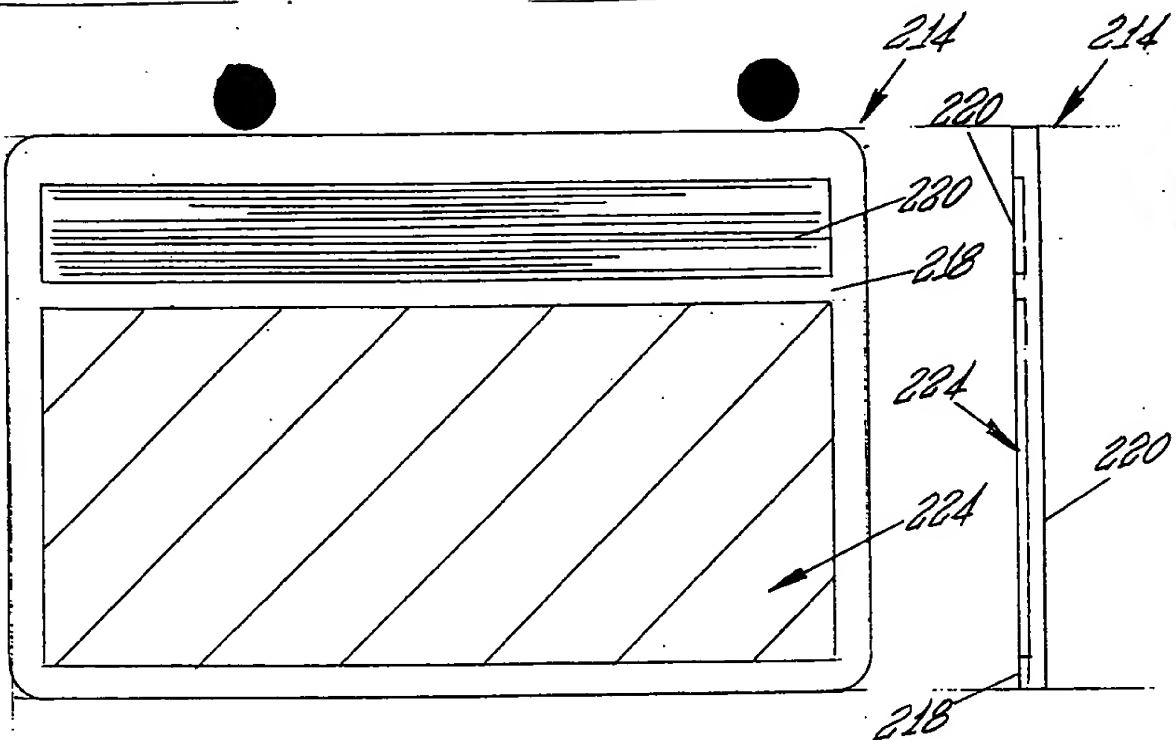


Fig 21



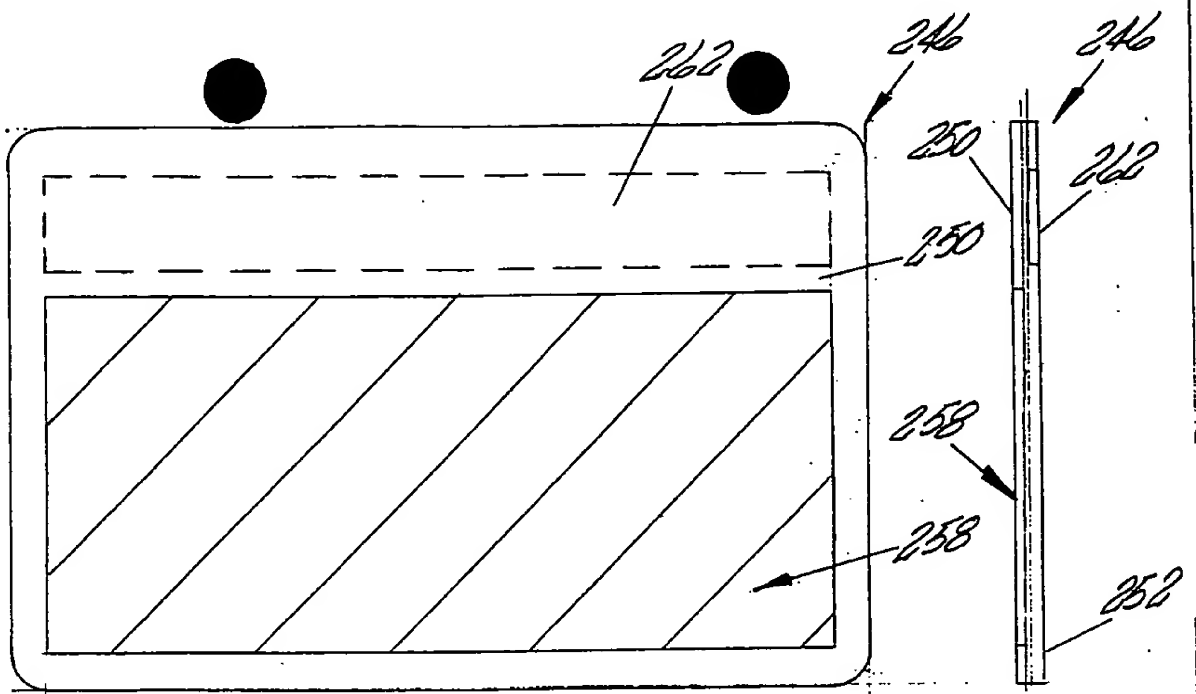


Fig. 26

Fig. 27

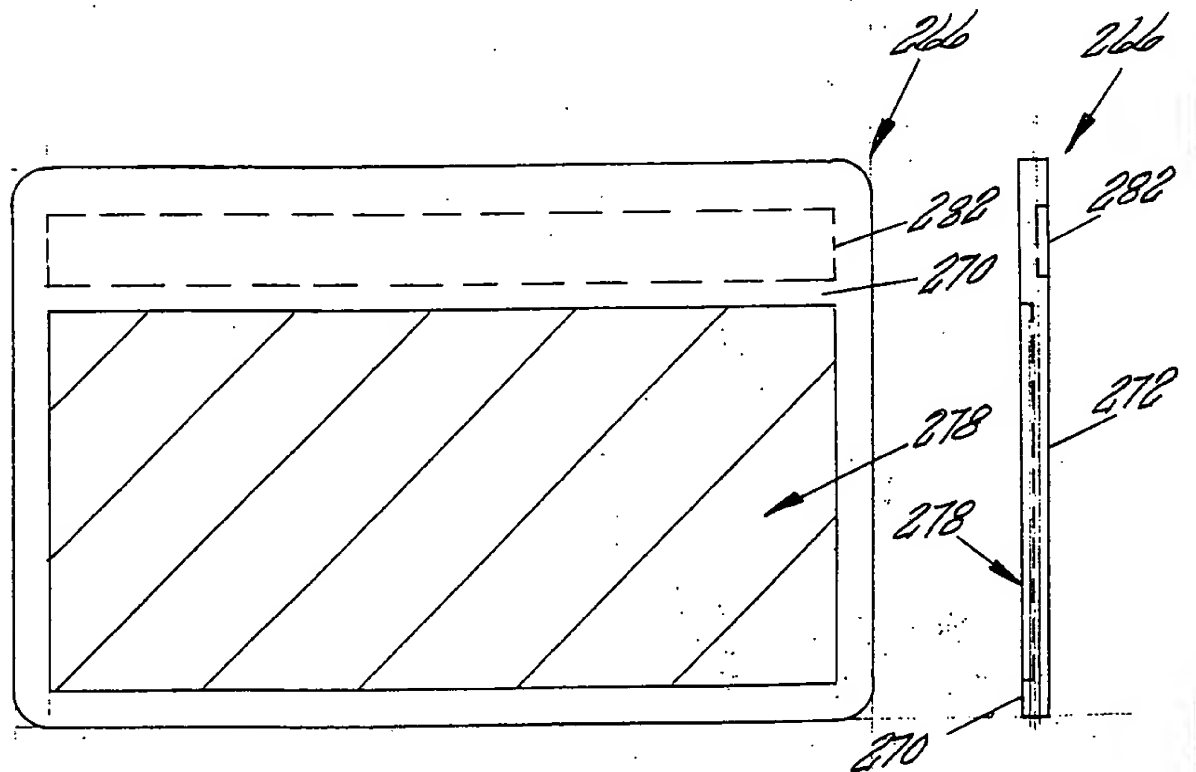


Fig. 28

Fig. 29

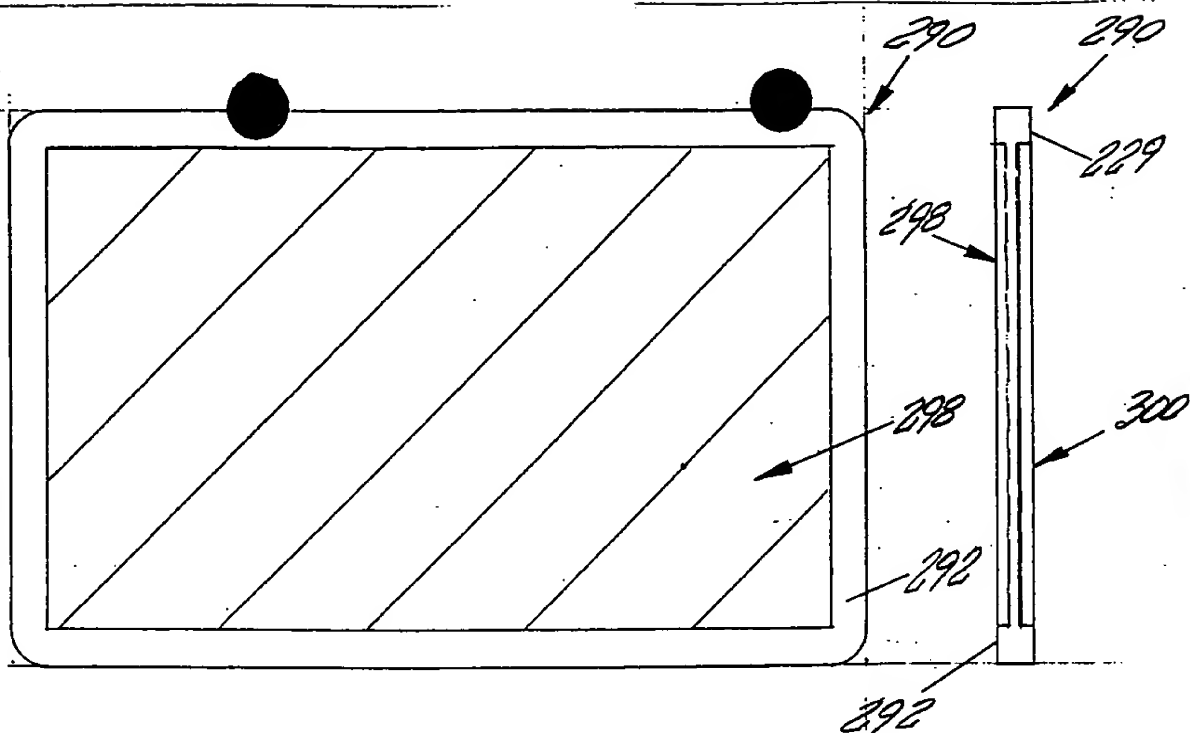


Fig 30

Fig 31

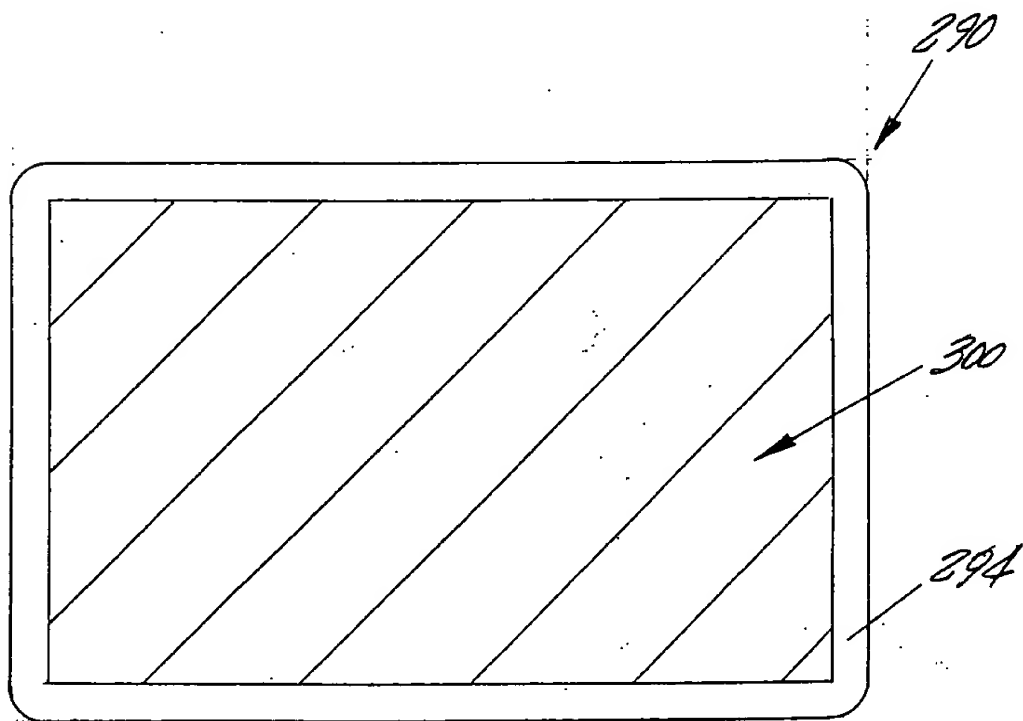
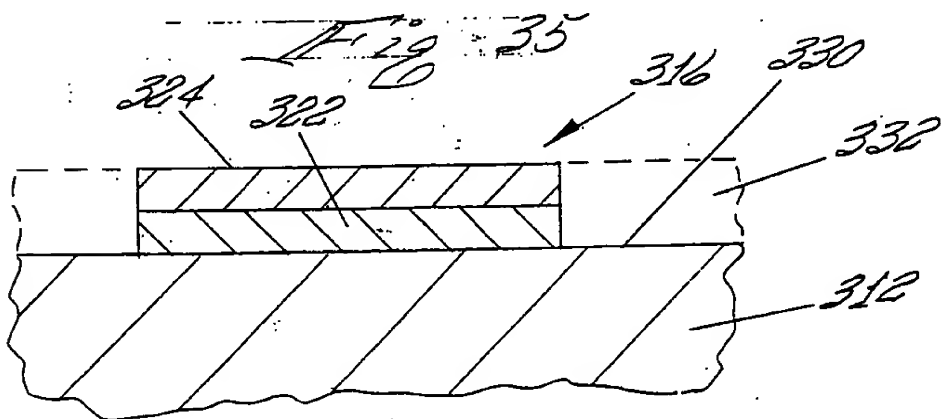
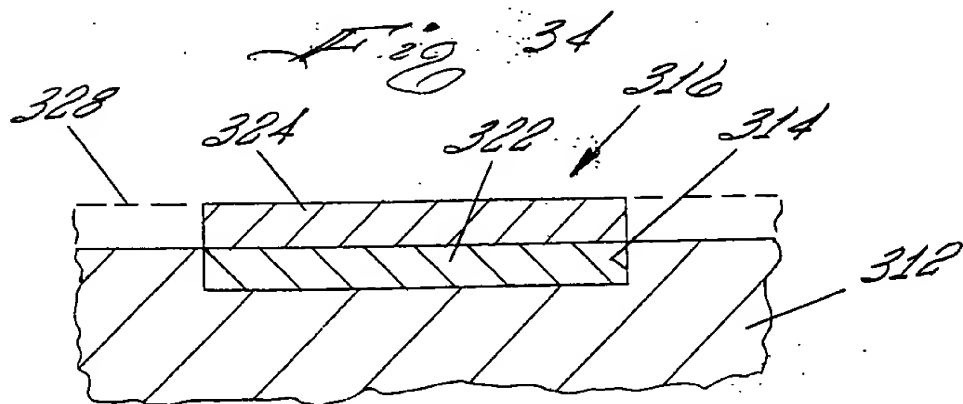
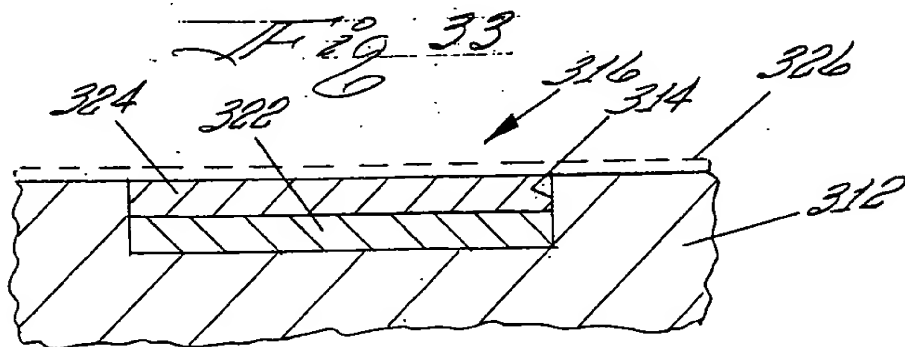
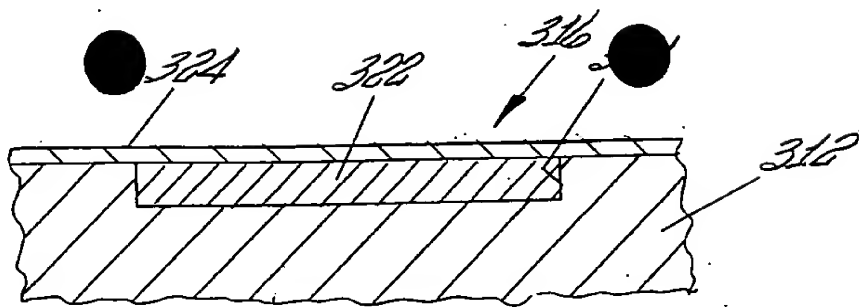


Fig 32





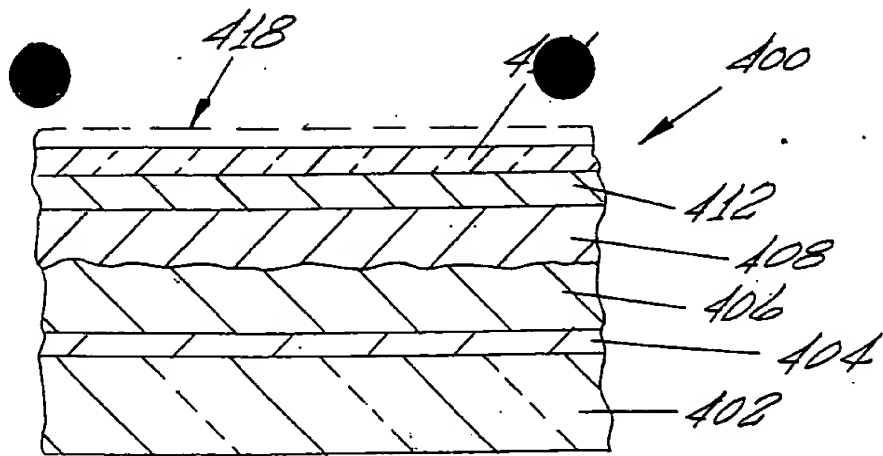


Fig 37

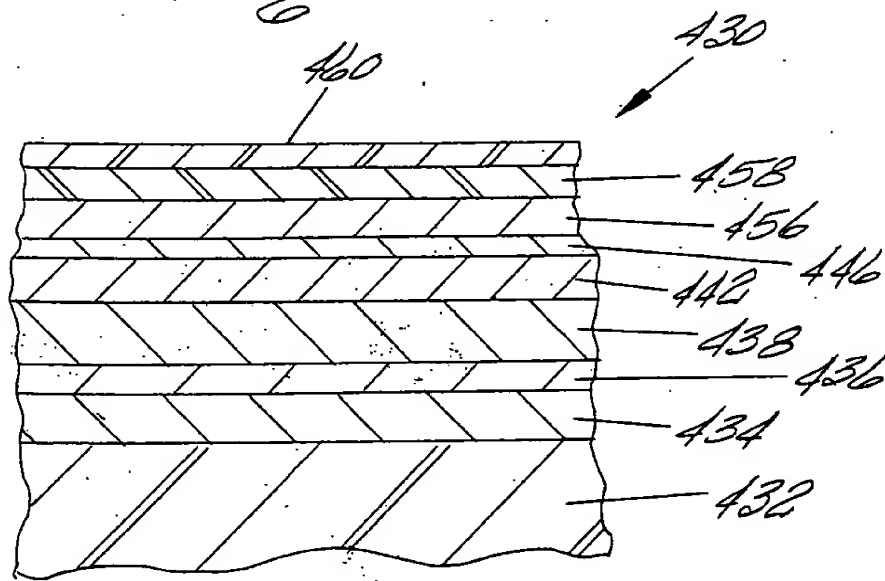


Fig 38

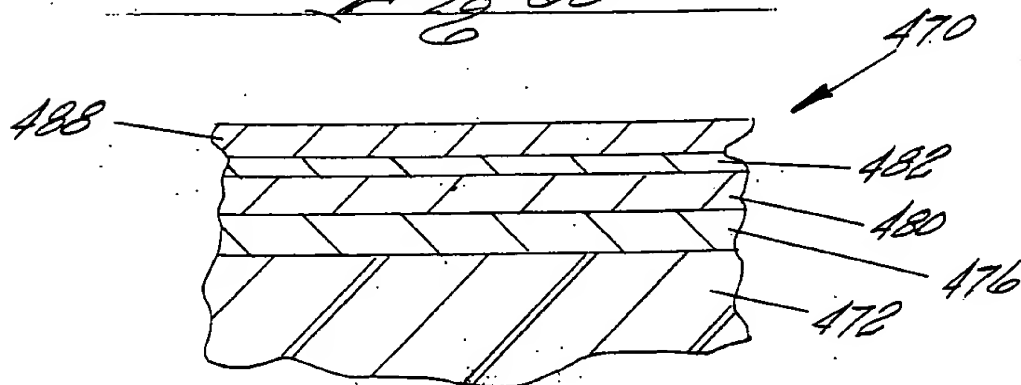


Fig 39

005160" 2E2E9960

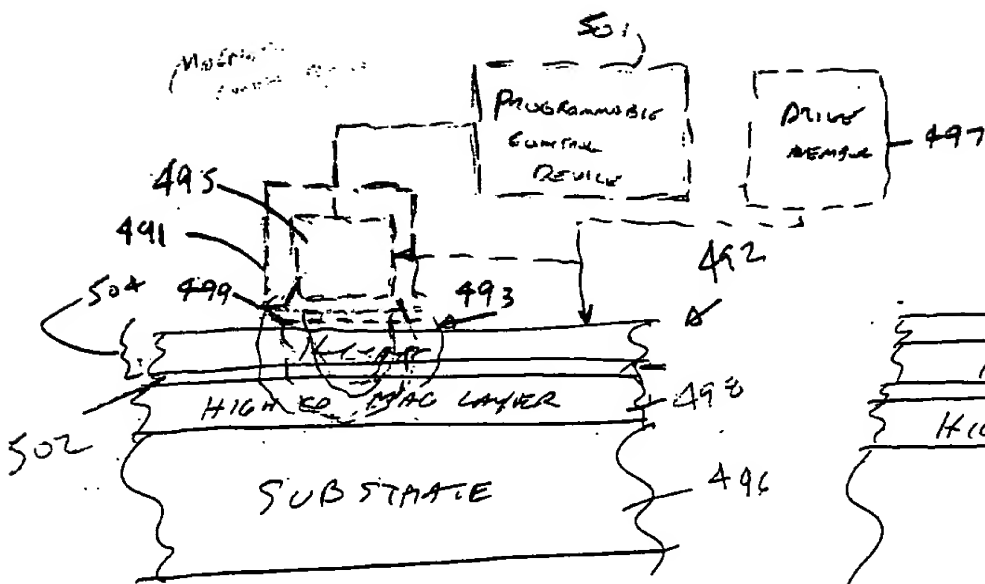


Fig 40(A)

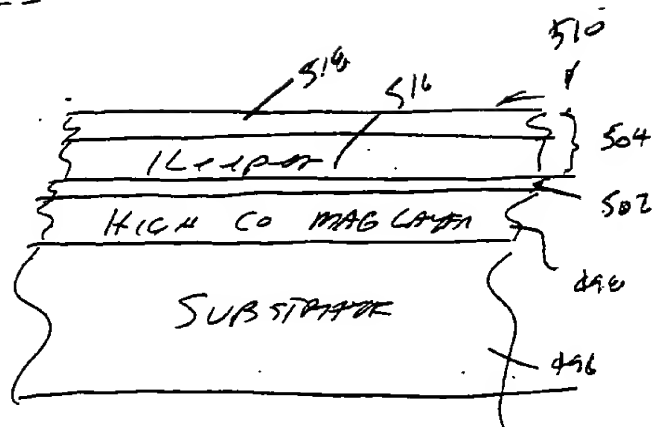


Fig 40(B)

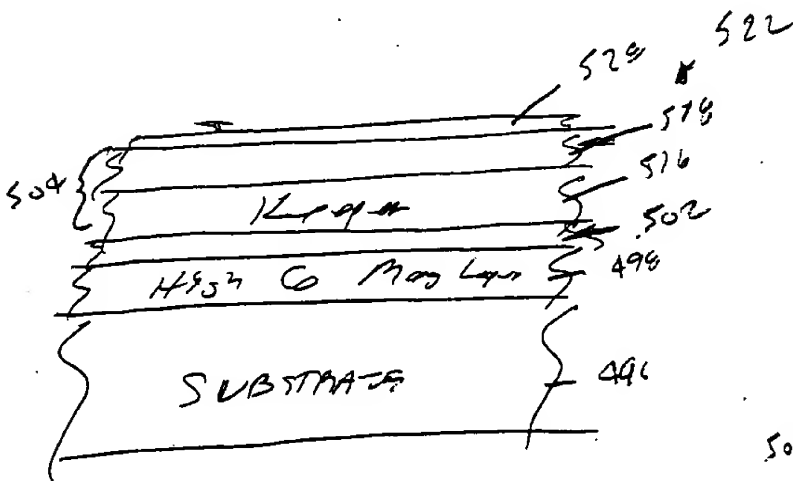


Fig 40(C)

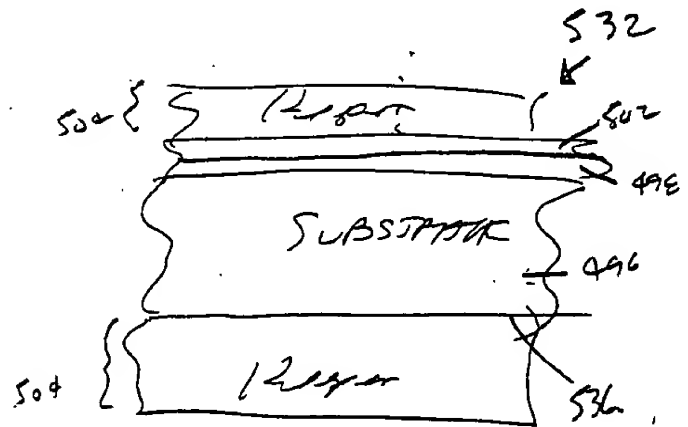
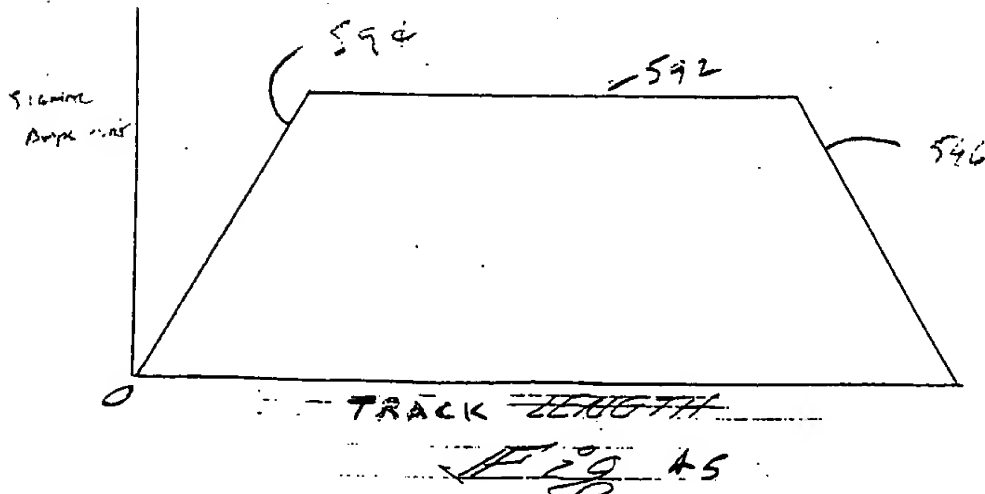
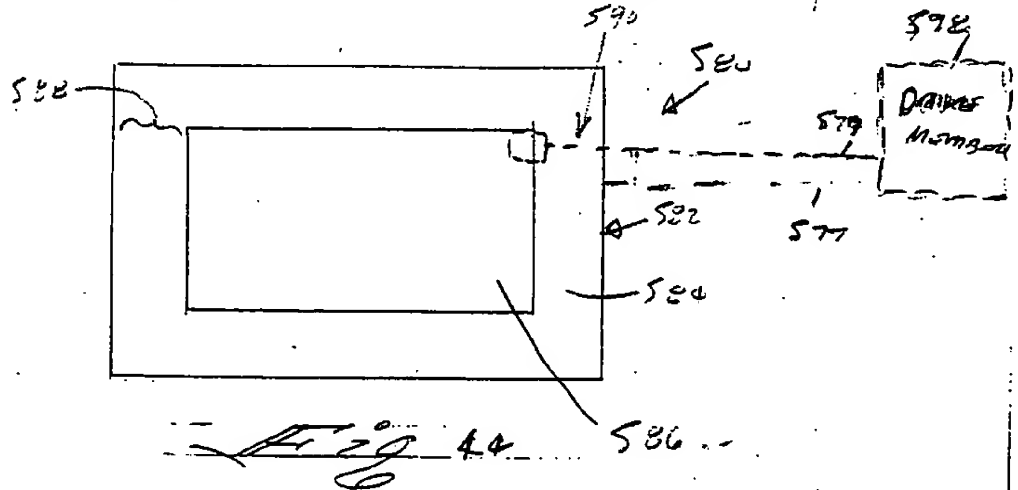
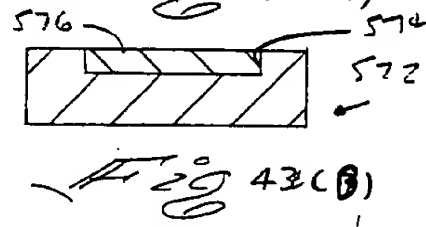
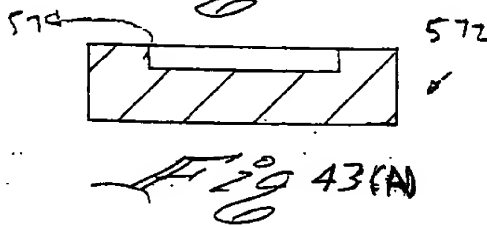
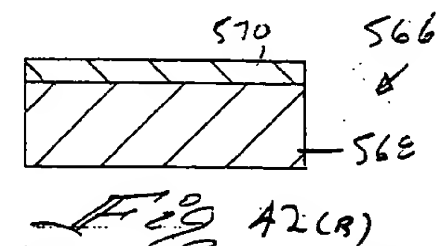
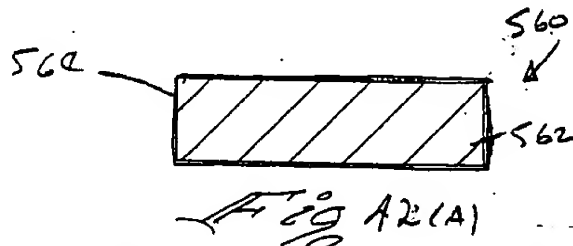
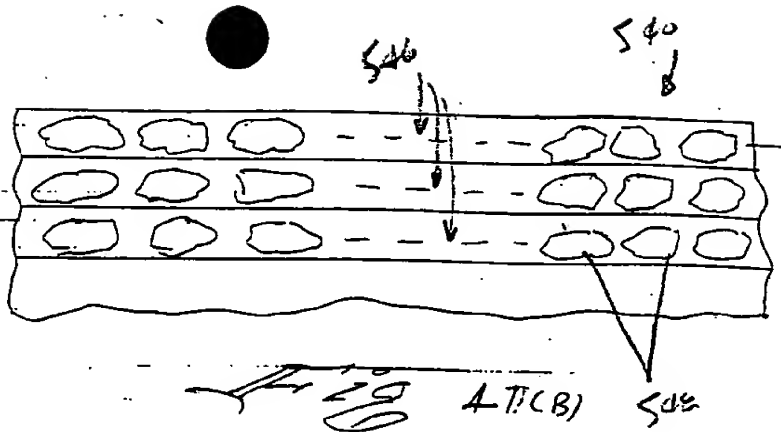
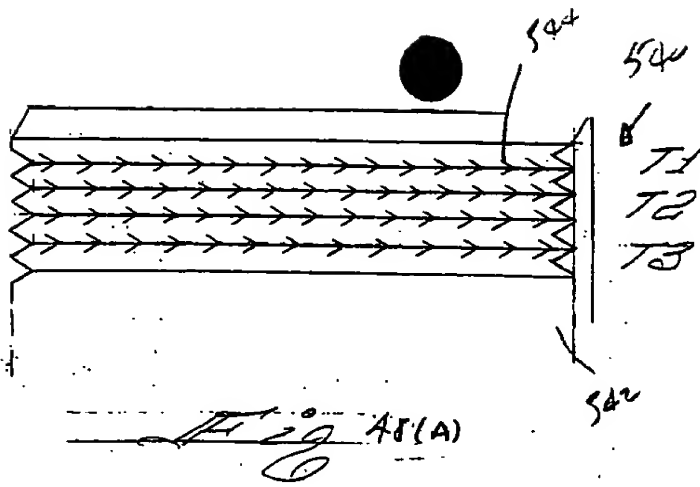
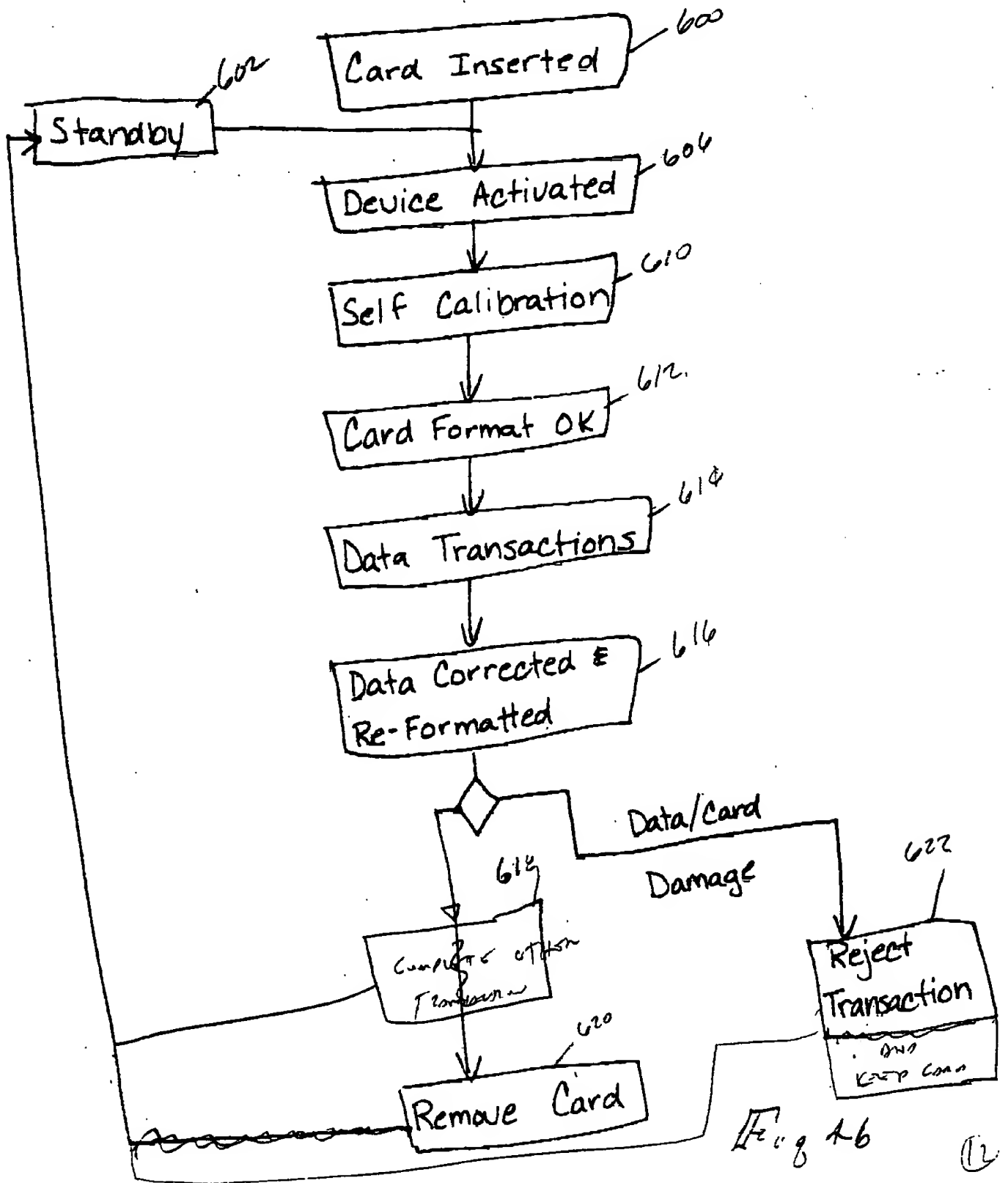


Fig 40(D)

005160-2289960



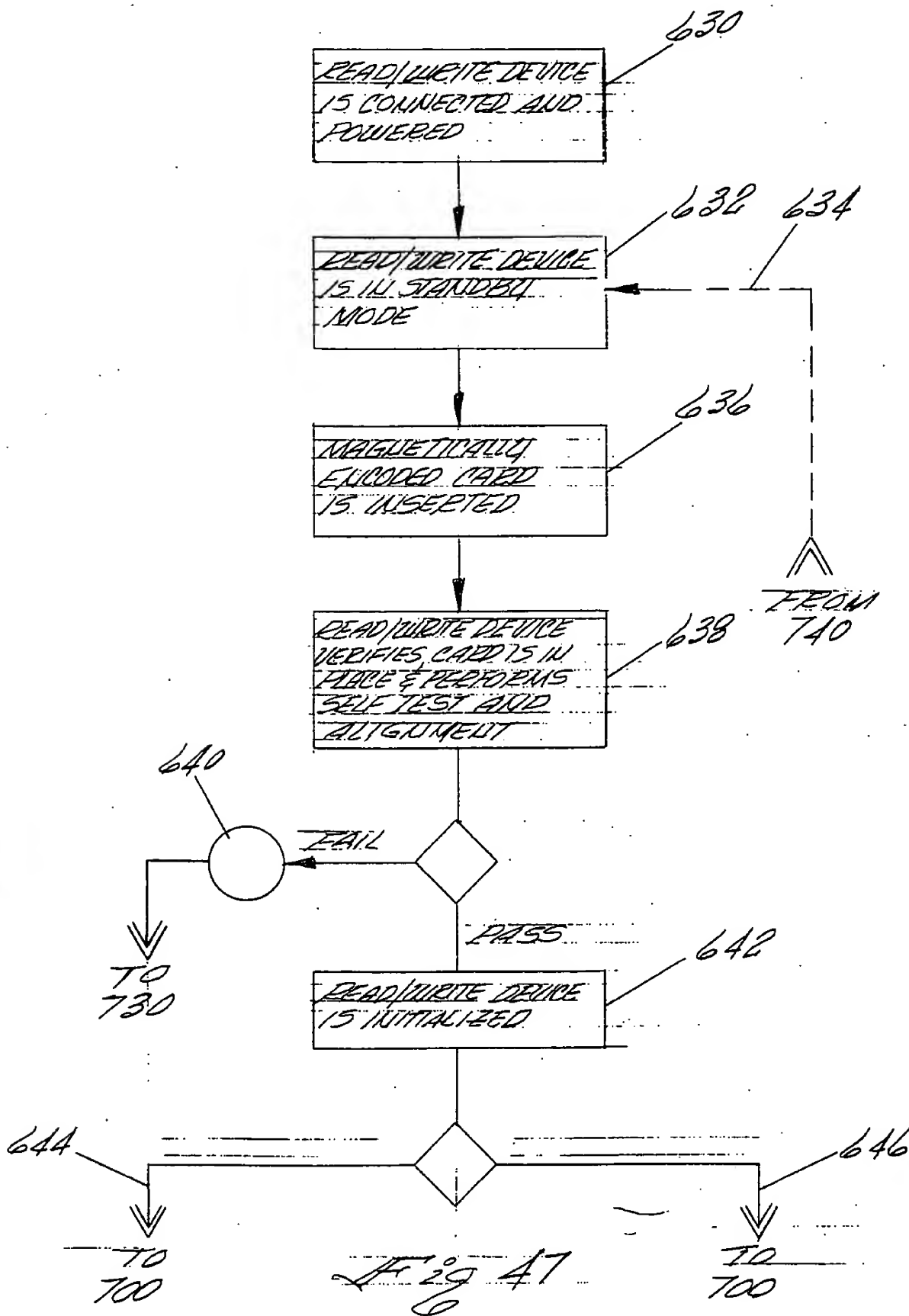
# Simplified Card Reader Schematic



005160 22339960

Fig 16

12



```

graph TD
    subgraph Left_Path [Left Path]
        L700[700 AUTHENTICATE CARD AND/OR USER] --> L702[702 SELECT THE APPLICATION]
        L702 --> L704[704 INITIATE WRITE AND/OR READ TRANSACTIONS]
        L704 --> L706[706 READ/WRITE DEVICE PERFORMS DATA VERIFICATION]
        L706 --> L718{718}
        L718 -- PASS --> L722[722 INDICATE THAT DATA COMPARE IS VALID]
        L718 -- FAIL --> L730[730 FLAG ERROR]
        L722 --> L724[724 PERFORM APPLICATION]
        L724 --> L728[728 REMOVE CARD]
    end

    subgraph Right_Path [Right Path]
        R700[700 AUTHENTICATE CARD AND/OR USER] --> R702[702 SELECT THE APPLICATION]
        R702 --> R704[704 INITIATE WRITE AND/OR READ TRANSACTIONS]
        R704 --> R706[706 READ/WRITE DEVICE PERFORMS DATA VERIFICATION]
        R706 --> R720{720}
        R720 -- PASS --> R722[722 DATA TRANSFER IS VALID]
        R720 -- FAIL --> R730[730 FLAG ERROR]
        R722 --> R724[724 PERFORM APPLICATION]
        R724 --> R734[734 HOLD CARD]
    end

    L718 -- FLAG ERROR --> L730
    R720 -- FLAG ERROR --> R730
    L730 --> L736[736]
    R730 --> R736
    L736 --> R724
    R736 --> R724
    L734[734 HOLD CARD] --> L740[740 READ/WRITE GOES INTO STANDBY MODE]
    L740 --> L728
    R728[728 REMOVE CARD] --> R740
    R740 --> R728
  
```

700 AUTHENTICATE CARD AND/OR USER

702 SELECT THE APPLICATION

704 INITIATE WRITE AND/OR READ TRANSACTIONS

706 READ/WRITE DEVICE PERFORMS DATA VERIFICATION

718

PASS

FAIL

722 INDICATE THAT DATA COMPARE IS VALID

724 PERFORM APPLICATION

728 REMOVE CARD

730 FLAG ERROR

736

734 HOLD CARD

740 READ/WRITE GOES INTO STANDBY MODE

710

714 HOLD CARD

716

712

714 RETURN CARD

716

720

PASS

FAIL

722 DATA TRANSFER IS VALID

724 PERFORM APPLICATION

728 REMOVE CARD

730 FLAG ERROR

736

734 HOLD CARD

740 READ/WRITE GOES INTO STANDBY MODE

710

714 HOLD CARD

716

712

714 RETURN CARD

716

720

PASS

FAIL

722 DATA TRANSFER IS VALID

724 PERFORM APPLICATION

728 REMOVE CARD

730 FLAG ERROR

736

734 HOLD CARD

740 READ/WRITE GOES INTO STANDBY MODE

710

714 HOLD CARD

716

712

714 RETURN CARD

716

720

PASS

FAIL

722 DATA TRANSFER IS VALID

724 PERFORM APPLICATION

728 REMOVE CARD

730 FLAG ERROR

736

734 HOLD CARD

740 READ/WRITE GOES INTO STANDBY MODE

710

714 HOLD CARD

716

712

714 RETURN CARD

716

720

PASS

FAIL

722 DATA TRANSFER IS VALID

724 PERFORM APPLICATION

728 REMOVE CARD

730 FLAG ERROR

736

734 HOLD CARD

740 READ/WRITE GOES INTO STANDBY MODE

710

714 HOLD CARD

716

712

714 RETURN CARD

716

720

PASS

FAIL

722 DATA TRANSFER IS VALID

724 PERFORM APPLICATION

728 REMOVE CARD

730 FLAG ERROR

736

734 HOLD CARD

740 READ/WRITE GOES INTO STANDBY MODE

710

714 HOLD CARD

716

712

714 RETURN CARD

716

720

PASS

FAIL

722 DATA TRANSFER IS VALID

724 PERFORM APPLICATION

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730 FLAG ERROR

736

734 HOLD CARD

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710

714 HOLD CARD

716

712

714 RETURN CARD

716

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PASS

FAIL

722 DATA TRANSFER IS VALID

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728 REMOVE CARD

730 FLAG ERROR

736

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710

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716

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PASS

FAIL

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730 FLAG ERROR

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FAIL

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728 REMOVE CARD

730 FLAG ERROR

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734 HOLD CARD

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712

714 RETURN CARD

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740 READ/WRITE GOES INTO STANDBY MODE

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714 HOLD CARD

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714 RETURN CARD

716

720

PASS

FAIL

722 DATA TRANSFER IS VALID

724 PERFORM APPLICATION

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730 FLAG ERROR

736

734 HOLD CARD

740 READ/WRITE GOES INTO STANDBY MODE

710

714 HOLD CARD

716

712

714 RETURN CARD

716

720

PASS

FAIL

722 DATA TRANSFER IS VALID

724 PERFORM APPLICATION

728 REMOVE CARD

730 FLAG ERROR

736

734 HOLD CARD

740 READ/WRITE GOES INTO STANDBY MODE

710

71

# Simplified Card Cleaner Schematic

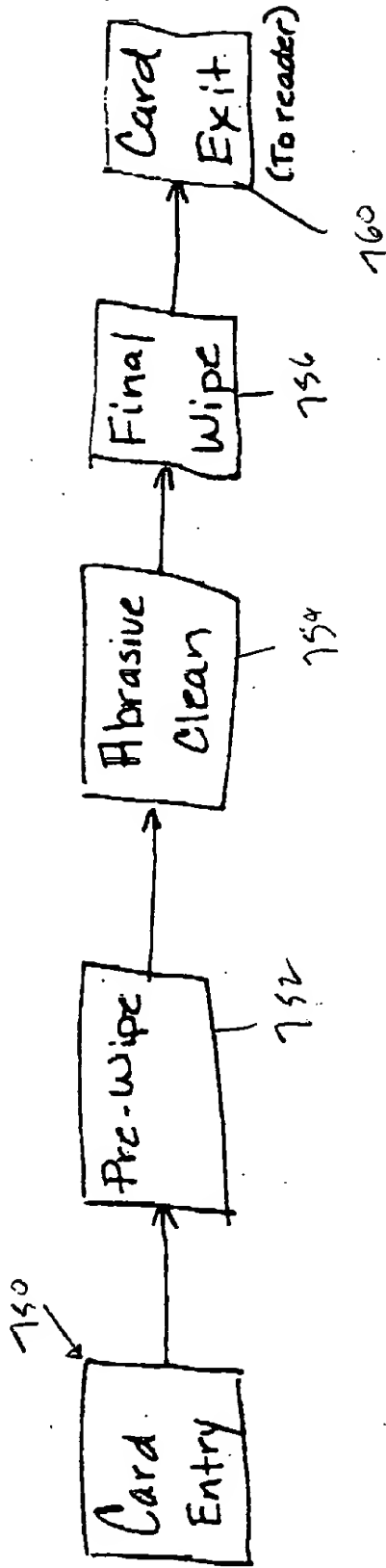
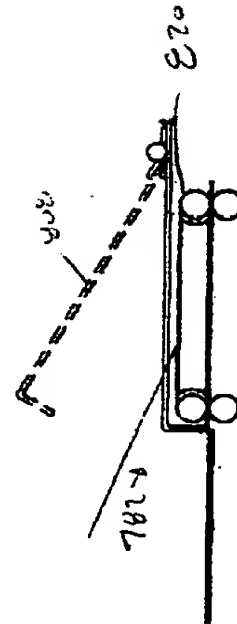
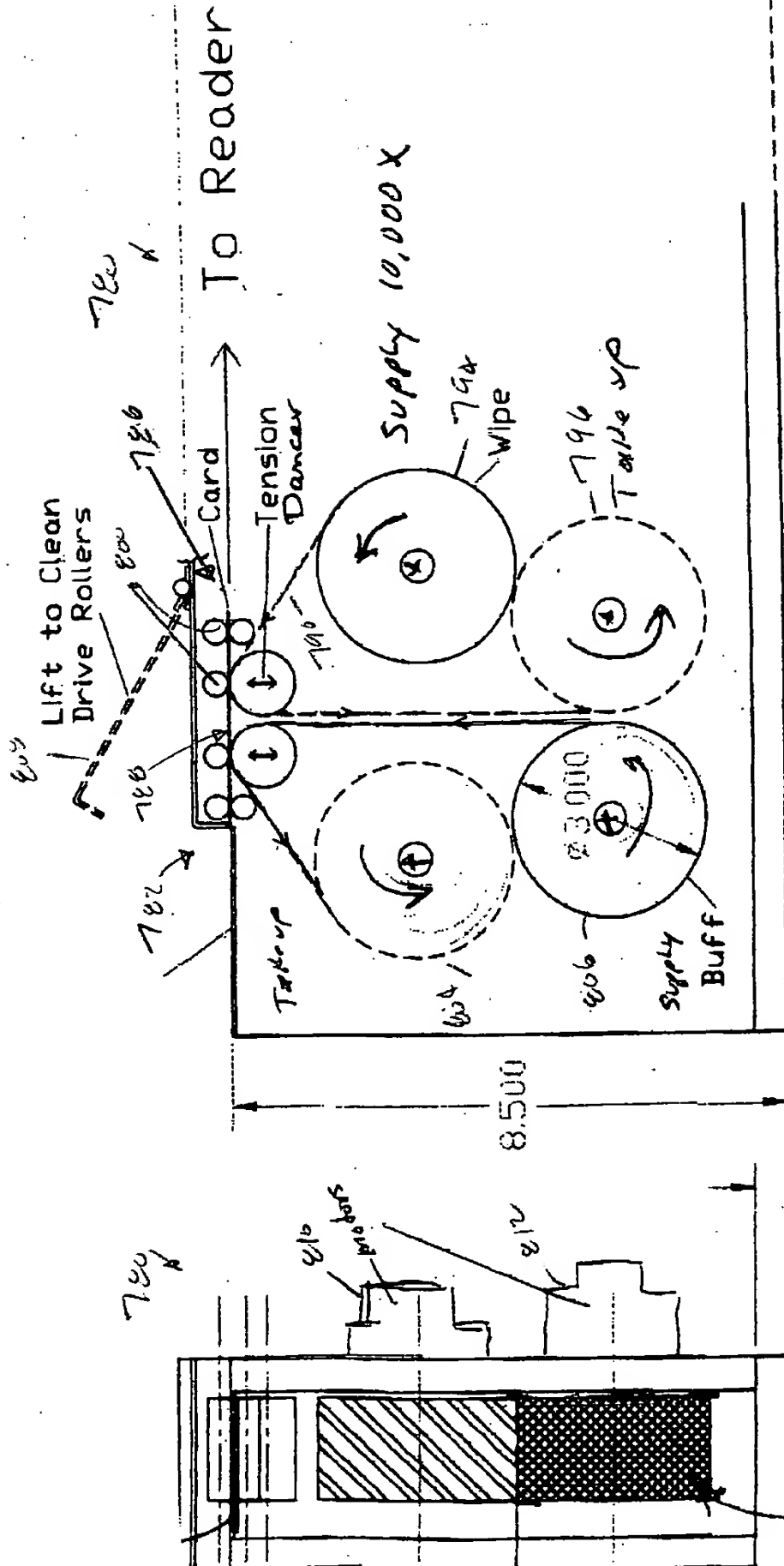


Fig 49

**07-06-2018**





09663832.091500

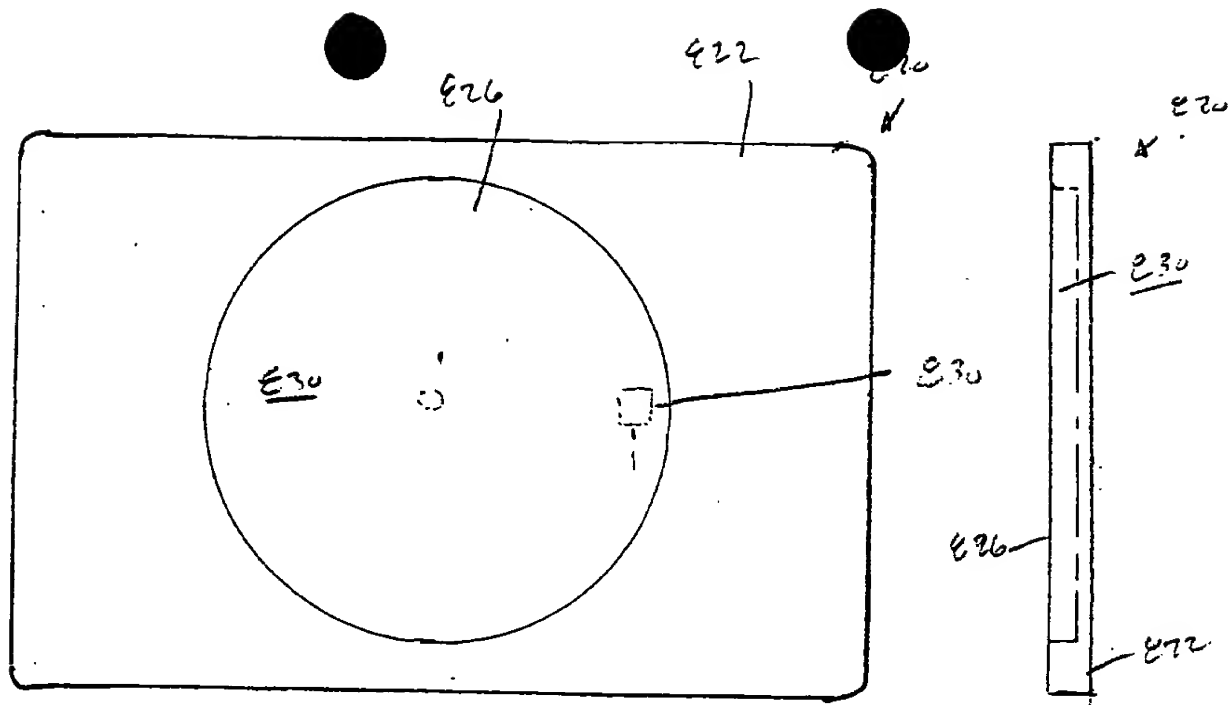


Fig 53

Fig 54

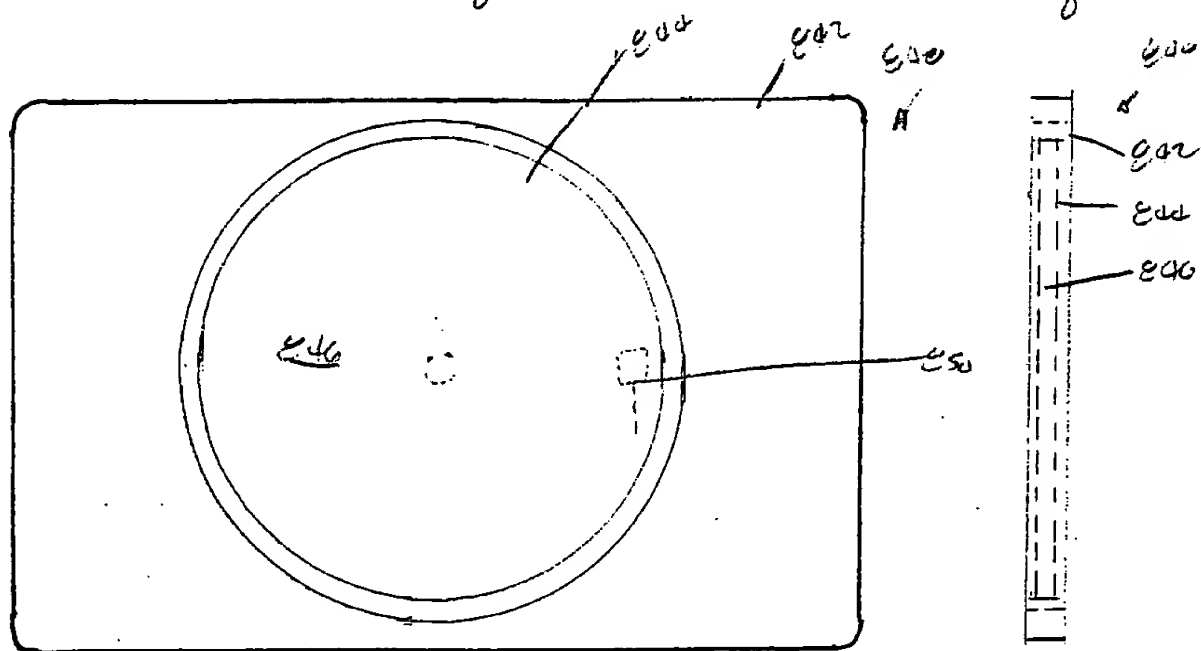
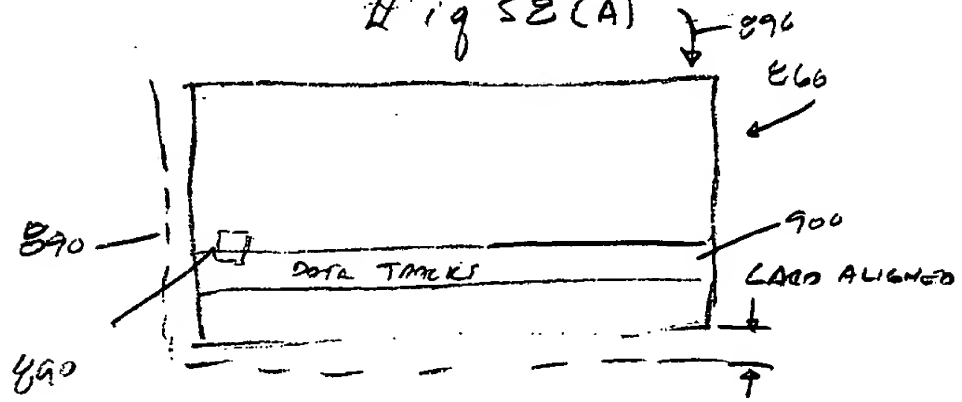
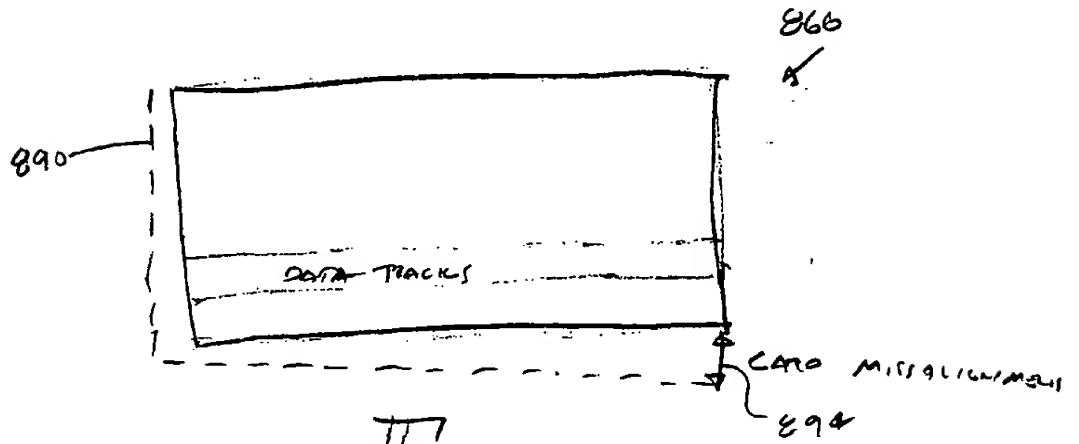
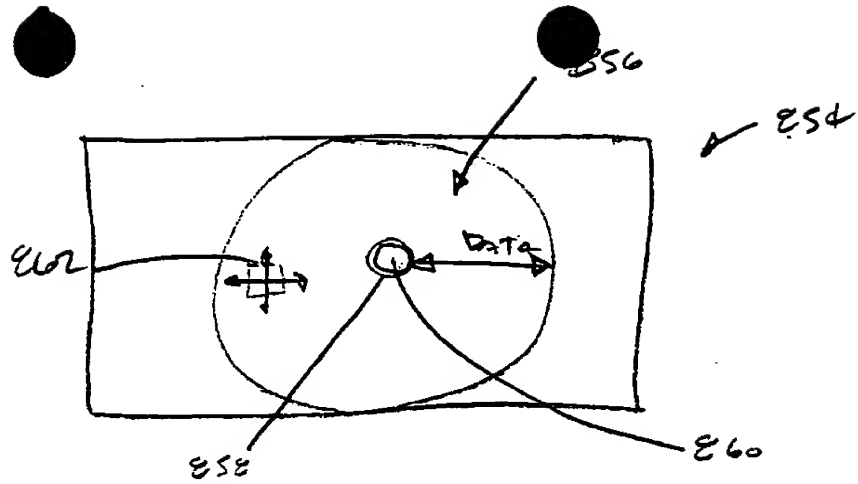


Fig 55

Fig 56



09663832-091500

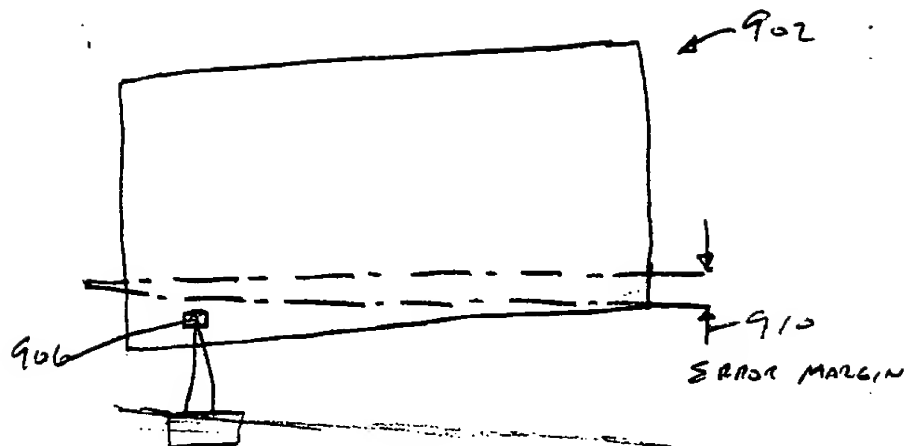


Fig 59(A)

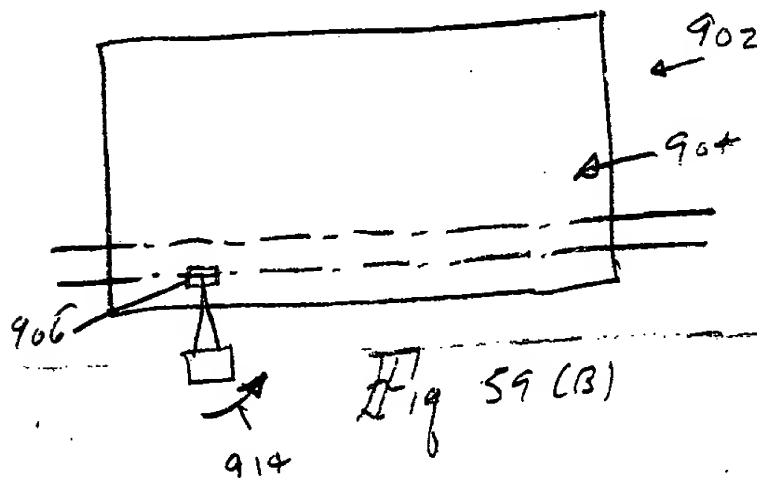
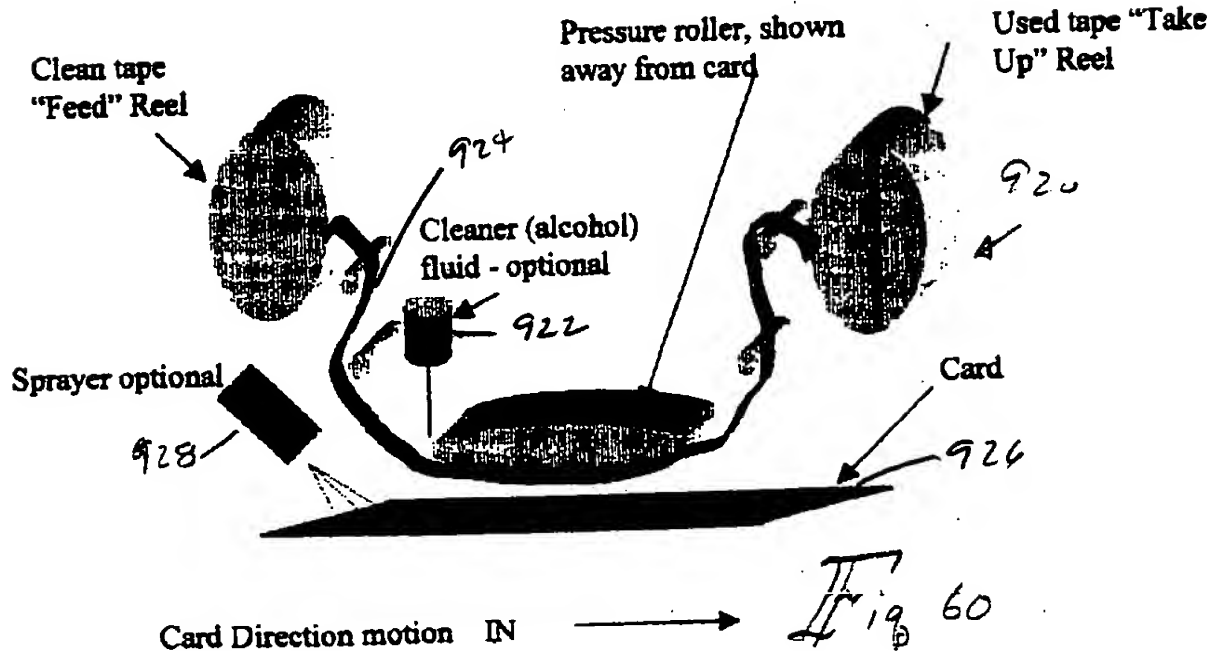


Fig 59(B)



005160-2689960

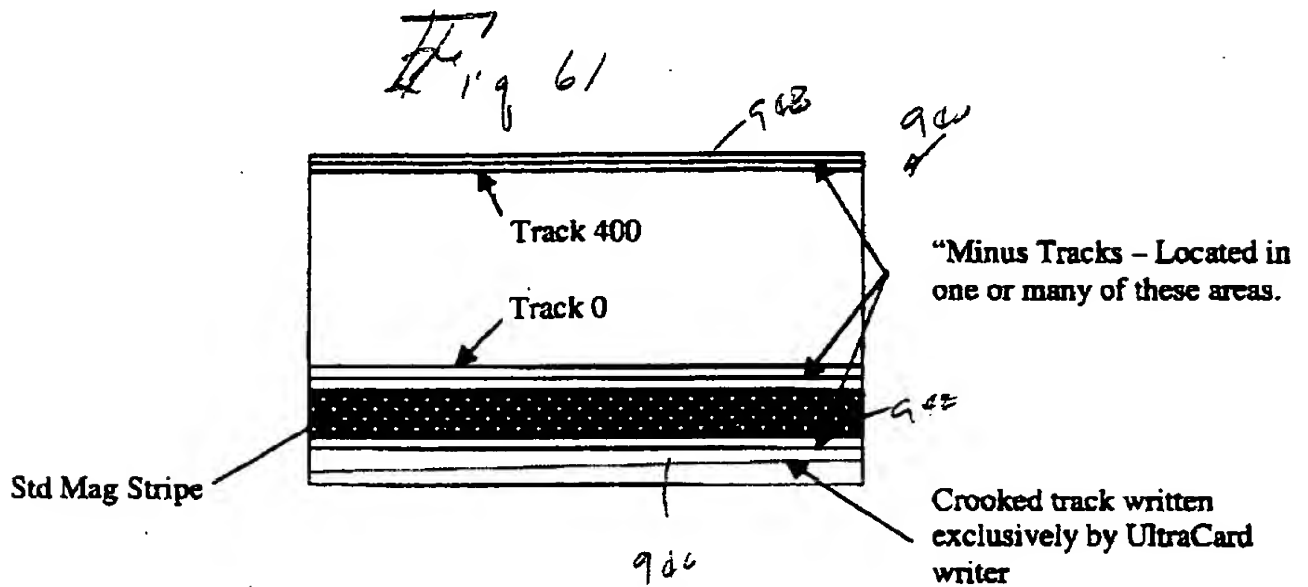
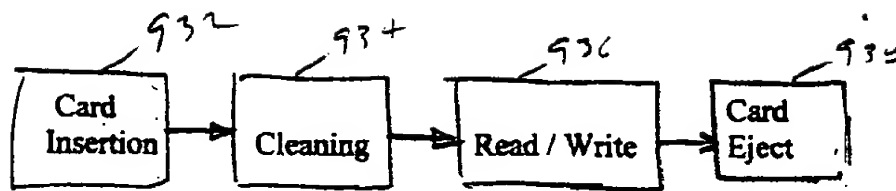


Fig 62

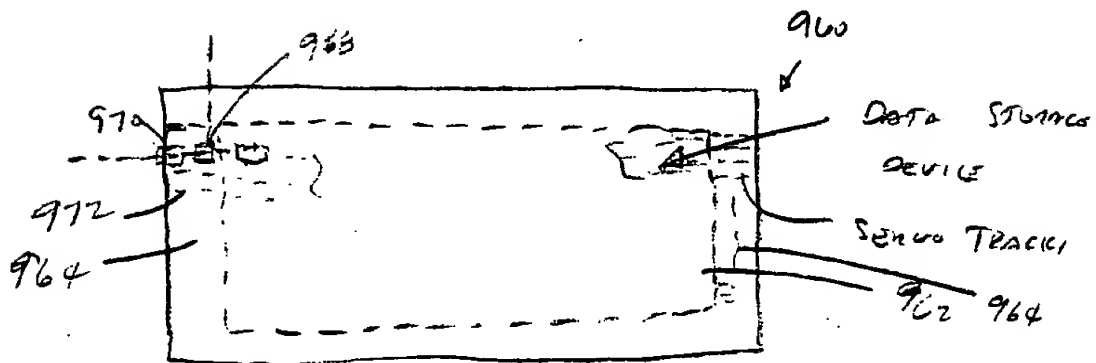


Fig 63

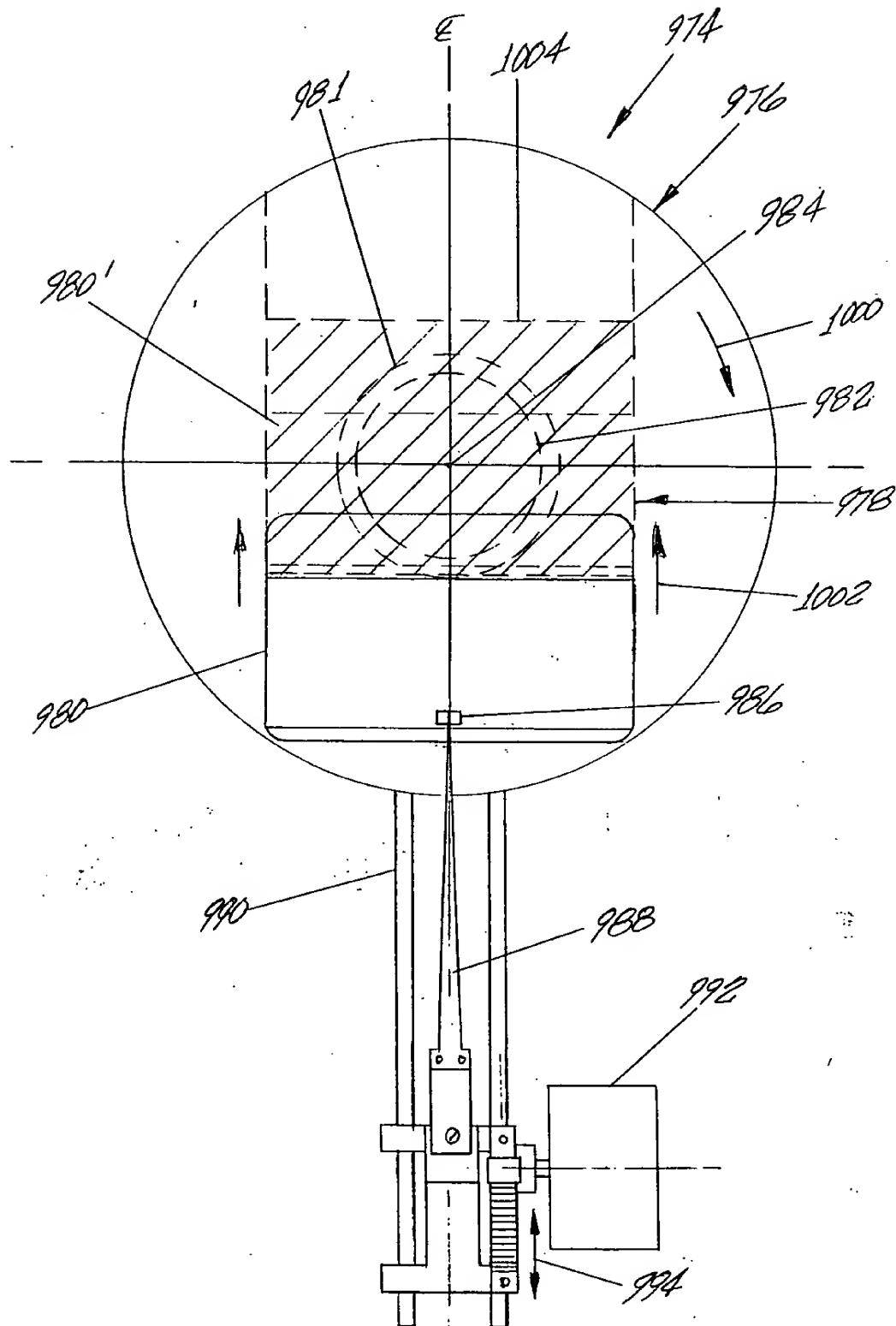
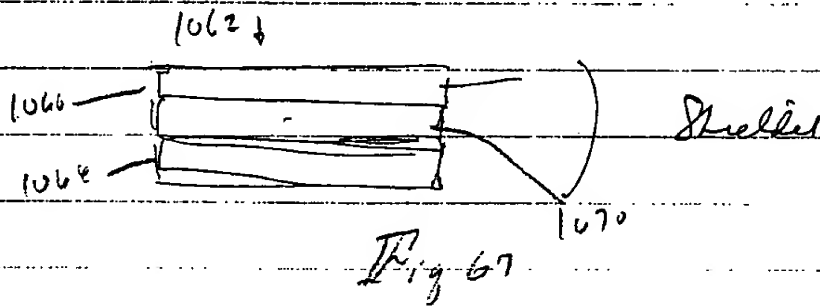
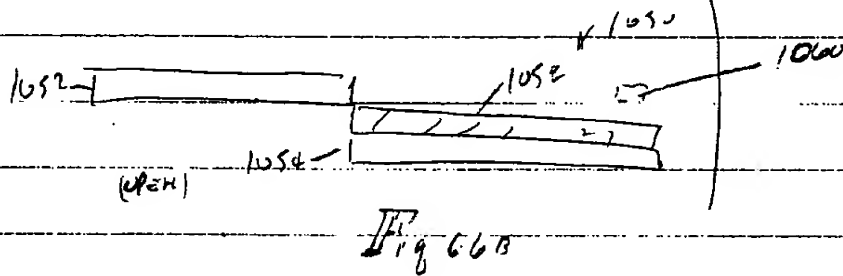
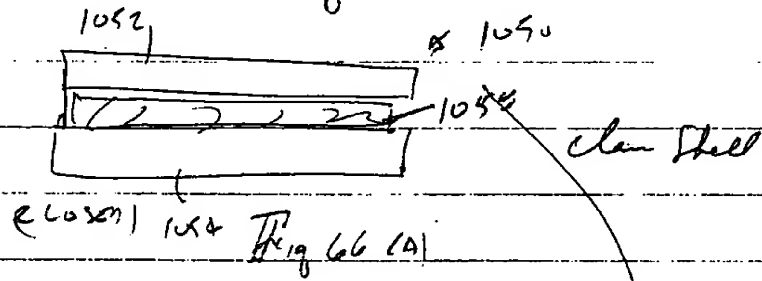
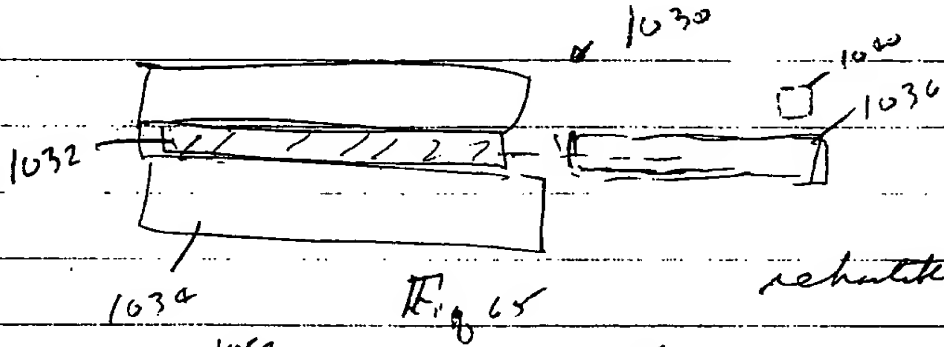


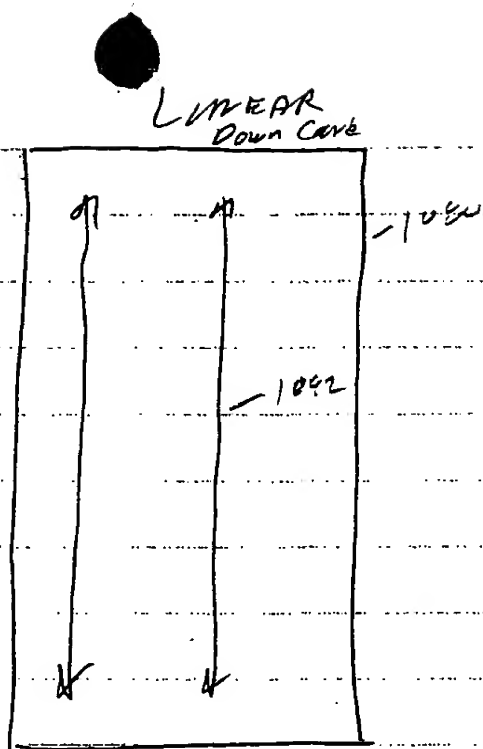
Fig 64

Draw

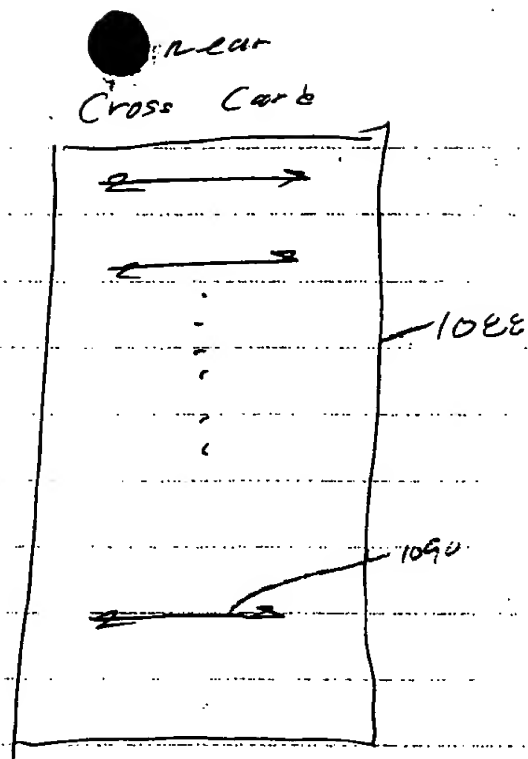


005160-2389960

00553832-091500



Rotation TH 68



TH 69

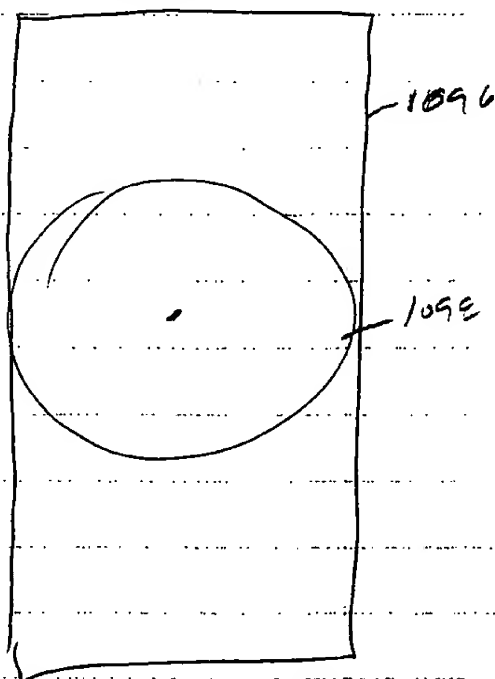
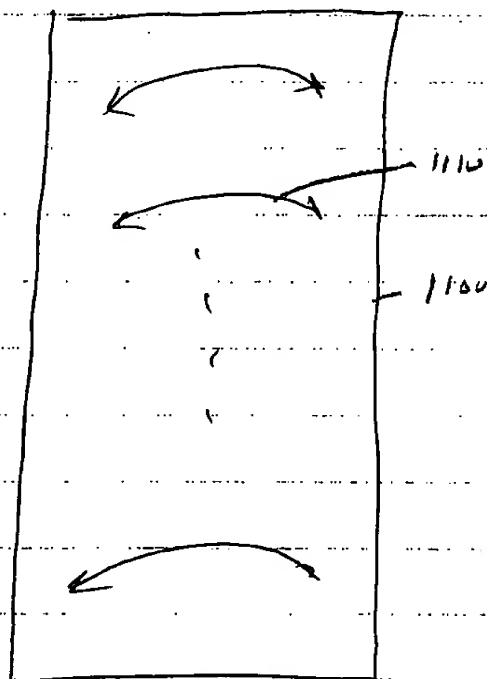
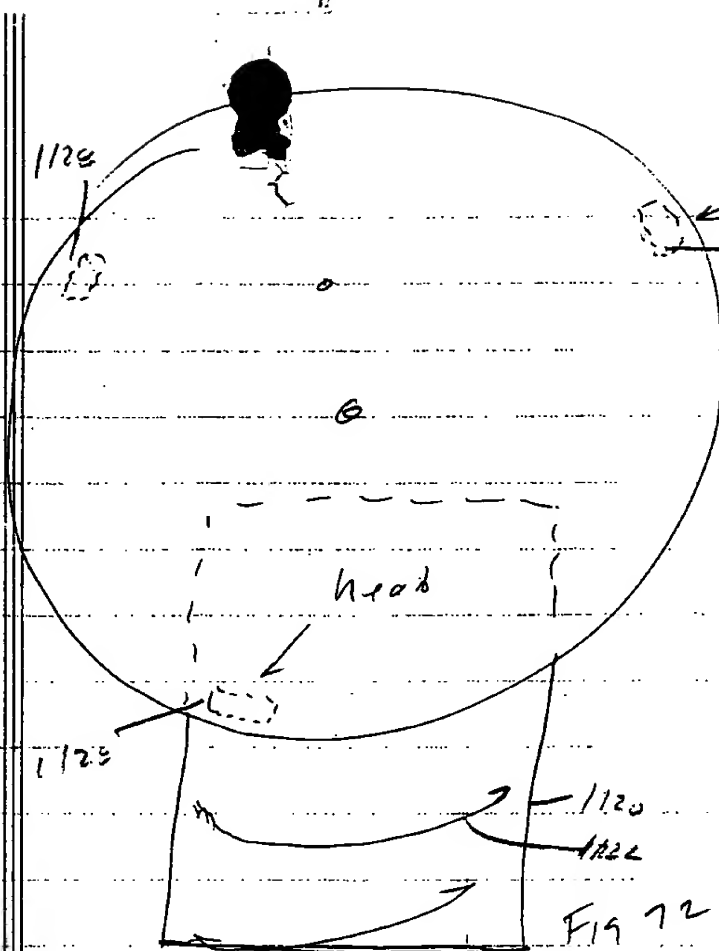


Fig 70

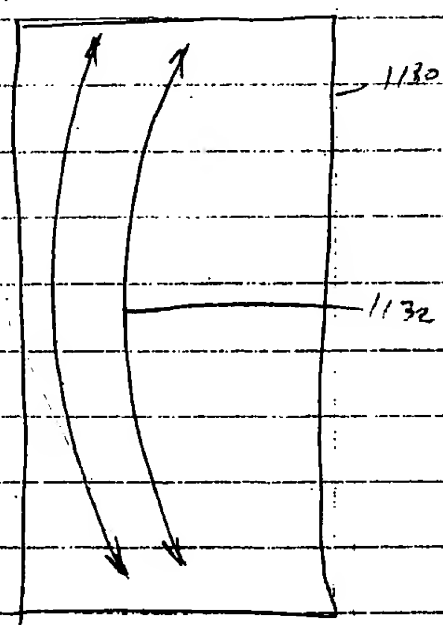


Arcuate Fig 71  
Cross Card

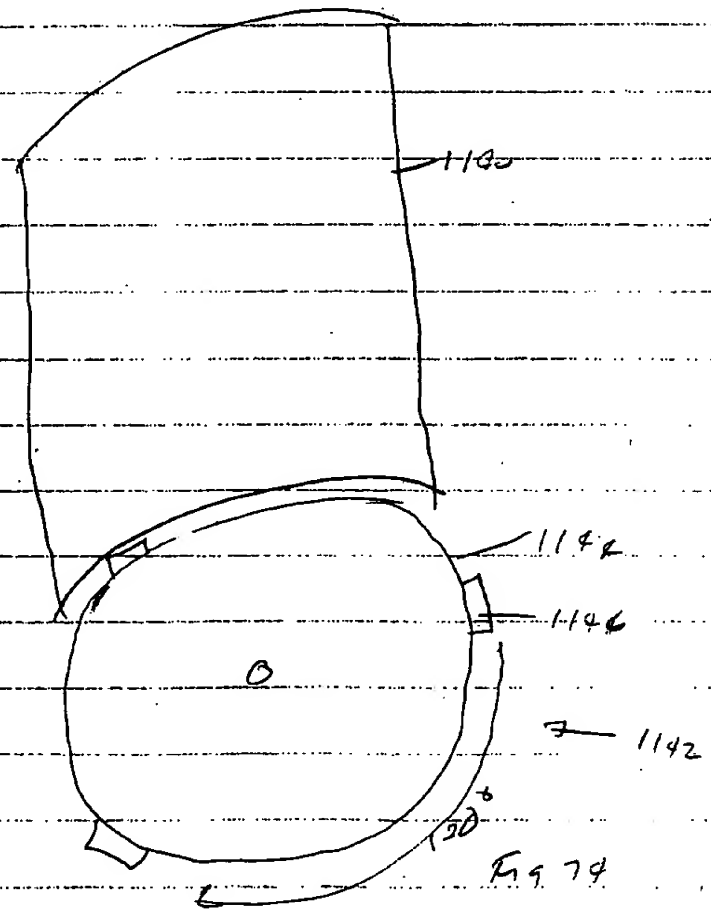


Rotating wheel

Top View



Accurate down card



Rotating Scanner  
purred card